SEQUENCE LISTING

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Xu, Chongjun

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<120> METHODS AND MATERIALS RELATING TO NOVEL SECRETED ADIPONECTIN-LIKE POLYPEPTIDES AND POLYNUCLEOTIDES

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<151> 2000-01-21

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Glu Phe Ala Gln Pro Glu Ile Gln Pro Gln Glu Phe Leu Asn Arg Arg
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Tyr Met Thr Glu Val Asp Tyr Ser Asn Lys Gln Gly Glu Glu Gln Pro
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tgg gaa gca gat tat gct aga aaa cca aat ctc cca aaa cgt tgg gat 726
Trp Glu Ala Asp Tyr Ala Arg Lys Pro Asn Leu Pro Lys Arg Trp Asp
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485 490 495

Ile Gln Val Ser Asn Gly Ser Leu Ala Phe Tyr Pro Ala Gln Thr Asn
500 505 510

Val Phe Pro Arg Pro Thr Gln Pro Phe Val Asn Ser Arg Gly Ser Val
515 520 525

Arg Gly Cys Thr Arg Gly Gly Arg Leu Ile Thr Asn Ser Tyr Arg Ser
530 535 540

Pro Gly Gly Tyr Lys Gly Phe Asp Thr Tyr Arg Gly Leu Pro Ser Ile
545 550 555 560

Ser Asn Gly Asn Tyr Ser Gln Leu Gln Phe Gln Ala Arg Glu Tyr Ser
565 570 575

Gly Ala Pro Tyr Ser Gln Arg Cys Leu Glu Thr Ser Glu Pro Leu Trp
580 585 590

Leu Leu Gly Lys Ala Arg Ile Ile Ser Ser Ser Val Ile Ser Glu Glu
595 600 605

Gly His Leu Val Val His Glu Gln Ile Arg Glu Val Ser Ser Pro Glu
610 615 620

Arg Asp Asn Glu Thr Phe Asn Ser Gly Asp Ser Gly Gln Gly Asp Ser
625 630 635 640

Arg Ser Met Thr Pro Val Asp Val Pro Val Thr Asn Pro Ala Ala Thr
645 650 655

Ile Leu Pro Val His Val Tyr Pro Leu Pro Gln Gln Met Arg Val Ala
660 665 670

Phe Ser Ala Ala Arg Thr Ser Asn Leu Ala Pro Gly Thr Leu Asp Gln
675 680 685

Pro Ile Val Phe Asp Leu Leu Leu Asn Asn Leu Gly Glu Thr Phe Asp
690 695 700

Leu Gln Leu Gly Arg Phe Asn Cys Pro Val Asn Gly Thr Tyr Val Phe

705 710 715 720

Ile Phe His Met Leu Lys Leu Ala Val Asn Val Pro Leu Tyr Val Asn
725 730 735

Leu Met Lys Asn Glu Glu Val Leu Val Ser Ala Tyr Ala Asn Asp Gly
740 745 750

Ala Pro Asp His Glu Thr Ala Ser Asn His Ala Ile Leu Gln Leu Phe
755 760 765

Gln Gly Asp Gln Ile Trp Leu Arg Leu His Arg Gly Ala Ile Tyr Gly
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Ser Ser Trp Lys Tyr Ser Thr Phe Ser Gly Tyr Leu Leu Tyr Gln Asp
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gagaagaaac aggagtcctt taagtcctgg gaggcttctg gtaagcacca ggaggtatcc 300

aagcctgcag tttccttaga acagaggaaa caagacacct caaaactcag gtctactctg 360

ccggaagagc agaagaagca ggagatctcc aaatccaagc catctcctag ccagtggaag 420

caagatacac ctaaatccaa agcagggtat gttcaagagg aacaaaagaa acaggagaca 480

ccaaagctgt ggccagttca gctgcagaaa gaacaagatc caaagaagca aactccaaag 540

tcttggacac cttccatgca gagcgaacag aacaccacca agtcatggac cactcccatg 600

tgtgaagaac aggattcaaa acagccagag actccaaaat cctgggaaaa caatgttgag 660

agtcaaaaac actctttaac atcacagtca cagatttctc caaagtcctg gggagtagct 720

acagcaagcc tcataccaaa tgaccagctg ctgcccagga agttgaacac agaacccaaa 780

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tttaccacag caagtacaca aacaccaccc cagtgccaac tgccatctat acatgtagaa 1440

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aatggtagcc ttgcctttta cccagcacag acgaatgtgt ttcccagacc tactcagcca 1560

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<213> Homo sapiens

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Ile Phe His Met
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<211> 22

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<211> 20

<212> PRT

<213> Homo sapiens

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Ile Trp Leu Arg
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<213> Homo sapiens

PCT/US2004/005005

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<211> 10

<212> PRT

<213> Homo sapiens

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<210> 12

<211> 20

<212> PRT

<213> Homo sapiens

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Lys Leu Ala Val
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<211> 27

<212> PRT

<213> Homo sapiens

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<211> 2643

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ttgcagaact tgacacagga gcacgtacaa aaagacttca aaggggggttt gaatggtgca 240

gtgtatttgc cttcaaaaga acttgactac ctcattaagt tttcaaaact gacctgccct 300

gaaagaaatg aaagtctgag tgttgaagac cagatggagc agtcatcctt gtacttttgg 360

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gacctttttgg aaggtagtga gaaagcagtg gtaggaacga catacaaaca cttgaaggat    420

ctactgtcta aattgctgaa ctcaggctat tttgaaagta tcccagttcc caaaaatgcc    480

aaggaaaagg aagtaccact ggaggaagaa atg cta ata caa tca gag aaa aaa      534
                                    Met Leu Ile Gln Ser Glu Lys Lys
                                    1               5

aca caa tta tcg aag act gaa tct gtc aaa gag tca gag tct cta atg       582
Thr Gln Leu Ser Lys Thr Glu Ser Val Lys Glu Ser Glu Ser Leu Met
    10                  15                  20

gaa ttt gcc cag cca gag ata caa cca caa gag ttt ctt aac aga cgc       630
Glu Phe Ala Gln Pro Glu Ile Gln Pro Gln Glu Phe Leu Asn Arg Arg
25                  30                  35                  40

tat atg aca gaa gta gat tat tca aac aaa caa ggc gaa gag caa cct       678
Tyr Met Thr Glu Val Asp Tyr Ser Asn Lys Gln Gly Glu Glu Gln Pro
                45                  50                  55

tgg gaa gca gat tat gct aga aaa cca aat ctc cca aaa cgt tgg gat       726
Trp Glu Ala Asp Tyr Ala Arg Lys Pro Asn Leu Pro Lys Arg Trp Asp
            60                  65                  70

atg ctt act gaa cca gat ggt caa gag aag aaa cag gag tcc ttt aag       774
Met Leu Thr Glu Pro Asp Gly Gln Glu Lys Lys Gln Glu Ser Phe Lys
        75                  80                  85

tcc tgg gag gct tct ggt aag cac cag gag gta tcc aag cct gca gtt       822
Ser Trp Glu Ala Ser Gly Lys His Gln Glu Val Ser Lys Pro Ala Val
    90                  95                  100

tcc tta gaa cag agg aaa caa gac acc tca aaa ctc agg tct act ctg       870
Ser Leu Glu Gln Arg Lys Gln Asp Thr Ser Lys Leu Arg Ser Thr Leu
105                 110                 115                 120

ccg gaa gag cag aag aag cag gag atc tcc aaa tcc aag cca tct cct       918
Pro Glu Glu Gln Lys Lys Gln Glu Ile Ser Lys Ser Lys Pro Ser Pro
                125                 130                 135

agc cag tgg aag caa gat aca cct aaa tcc aaa gca ggg tat gtt caa       966
Ser Gln Trp Lys Gln Asp Thr Pro Lys Ser Lys Ala Gly Tyr Val Gln
            140                 145                 150

gag gaa caa aag aaa cag gag aca cca aag ctg tgg cca gtt cag ctg      1014
Glu Glu Gln Lys Lys Gln Glu Thr Pro Lys Leu Trp Pro Val Gln Leu
        155                 160                 165

cag aaa gaa caa gat cca aag aag caa act cca aag tct tgg aca cct      1062
Gln Lys Glu Gln Asp Pro Lys Lys Gln Thr Pro Lys Ser Trp Thr Pro
    170                 175                 180

tcc atg cag agc gaa cag aac acc acc aag tca tgg acc act ccc atg      1110
Ser Met Gln Ser Glu Gln Asn Thr Thr Lys Ser Trp Thr Thr Pro Met
185                 190                 195                 200
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tgt gaa gaa cag gat tca aaa cag cca gag act cca aaa tcc tgg gaa     1158
Cys Glu Glu Gln Asp Ser Lys Gln Pro Glu Thr Pro Lys Ser Trp Glu
                205                 210                 215

aac aat gtt gag agt caa aaa cac tct tta aca tca cag tca cag att     1206
Asn Asn Val Glu Ser Gln Lys His Ser Leu Thr Ser Gln Ser Gln Ile
            220                 225                 230

tct cca aag tcc tgg gga gta gct aca gca agc ctc ata cca aat gac     1254
Ser Pro Lys Ser Trp Gly Val Ala Thr Ala Ser Leu Ile Pro Asn Asp
        235                 240                 245

cag ctg ctg ccc agg aag ttg aac aca gaa ccc aaa gat gtg cct aag     1302
Gln Leu Leu Pro Arg Lys Leu Asn Thr Glu Pro Lys Asp Val Pro Lys
    250                 255                 260

cct gtg cat cag cct gta ggt tct tcc tct acc ctt ccg aag gat cca     1350
Pro Val His Gln Pro Val Gly Ser Ser Ser Thr Leu Pro Lys Asp Pro
265                 270                 275                 280

gta ttg agg aaa gaa aaa ctg cag gat ctg atg act cag att caa gga     1398
Val Leu Arg Lys Glu Lys Leu Gln Asp Leu Met Thr Gln Ile Gln Gly
                285                 290                 295

act tgt aac ttt atg caa gag tct gtt ctt gac ttt gac aaa cct tca     1446
Thr Cys Asn Phe Met Gln Glu Ser Val Leu Asp Phe Asp Lys Pro Ser
            300                 305                 310

agt gca att cca acg tca caa ccg cct tca gct act cca ggt agc ccc     1494
Ser Ala Ile Pro Thr Ser Gln Pro Pro Ser Ala Thr Pro Gly Ser Pro
        315                 320                 325

gta gca tct aaa gaa caa aat ctg tcc agt caa agt gat ttt ctt caa     1542
Val Ala Ser Lys Glu Gln Asn Leu Ser Ser Gln Ser Asp Phe Leu Gln
    330                 335                 340

gag ccg tta cag gta ttt aac gtt aat gca cct ctg cct cca cga aaa     1590
Glu Pro Leu Gln Val Phe Asn Val Asn Ala Pro Leu Pro Pro Arg Lys
345                 350                 355                 360

gaa caa gaa ata aaa gaa tcc cct tat tca cct ggc tac aat caa agt     1638
Glu Gln Glu Ile Lys Glu Ser Pro Tyr Ser Pro Gly Tyr Asn Gln Ser
                365                 370                 375

ttt acc aca gca agt aca caa aca cca ccc cag tgc caa ctg cca tct     1686
Phe Thr Thr Ala Ser Thr Gln Thr Pro Pro Gln Cys Gln Leu Pro Ser
            380                 385                 390

ata cat gta gaa caa act gtc cat tct caa gag act gca gca aat tat     1734
Ile His Val Glu Gln Thr Val His Ser Gln Glu Thr Ala Ala Asn Tyr
        395                 400                 405

cat cct gat gga act att caa gta agc aat ggt agc ctt gcc ttt tac     1782
His Pro Asp Gly Thr Ile Gln Val Ser Asn Gly Ser Leu Ala Phe Tyr
    410                 415                 420

cca gca cag acg aat gtg ttt ccc aga cct act cag cca ttt gtc aat     1830
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Pro Ala Gln Thr Asn Val Phe Pro Arg Pro Thr Gln Pro Phe Val Asn
425                 430                 435                 440

agc cgg gga tct gtt aga gga tgt act cgt ggt ggg aga tta ata acc     1878
Ser Arg Gly Ser Val Arg Gly Cys Thr Arg Gly Gly Arg Leu Ile Thr
                445                 450                 455

aat tcc tat cgg tcc cct ggt ggt tat aaa ggt ttt gat act tat aga     1926
Asn Ser Tyr Arg Ser Pro Gly Gly Tyr Lys Gly Phe Asp Thr Tyr Arg
            460                 465                 470

gga ctc cct tca att tcc aat gga aat tat agc cag ctg cag ttc caa     1974
Gly Leu Pro Ser Ile Ser Asn Gly Asn Tyr Ser Gln Leu Gln Phe Gln
        475                 480                 485

gct aga gag tat tct gga gca cct tat tcc caa agg gat aat ttc cag     2022
Ala Arg Glu Tyr Ser Gly Ala Pro Tyr Ser Gln Arg Asp Asn Phe Gln
    490                 495                 500

cag tgt tat aag cga gga ggg aca tct ggt ggt cca cga gca aat tcg     2070
Gln Cys Tyr Lys Arg Gly Gly Thr Ser Gly Gly Pro Arg Ala Asn Ser
505                 510                 515                 520

aga gca ggg tgg agt gat tct tct cag gtg agc agc cca gaa aga gac     2118
Arg Ala Gly Trp Ser Asp Ser Ser Gln Val Ser Ser Pro Glu Arg Asp
                525                 530                 535

aac gaa acc ttt aac agt ggt gac tct gga caa gga gac tcc cgt agc     2166
Asn Glu Thr Phe Asn Ser Gly Asp Ser Gly Gln Gly Asp Ser Arg Ser
            540                 545                 550

atg acc cct gtg gat gtg cca gtg aca aat cca gca gcc acc ata ctg     2214
Met Thr Pro Val Asp Val Pro Val Thr Asn Pro Ala Ala Thr Ile Leu
        555                 560                 565

cca gta cac gtc tac cct ctg cct cag cag atg cga gtt gcc ttc tca     2262
Pro Val His Val Tyr Pro Leu Pro Gln Gln Met Arg Val Ala Phe Ser
    570                 575                 580

gca gcc aga acc tct aat ctg gcc cct gga act tta gac caa cct tat     2310
Ala Ala Arg Thr Ser Asn Leu Ala Pro Gly Thr Leu Asp Gln Pro Tyr
585                 590                 595                 600

ggt gtt gat ctt ctt ctg aac aac tta gga gaa act ttt gat ctt cag     2358
Gly Val Asp Leu Leu Leu Asn Asn Leu Gly Glu Thr Phe Asp Leu Gln
                605                 610                 615

ctt ggt aga ttt aat tgc cca gtg aat ggc act tac gtt ttc att ttt     2406
Leu Gly Arg Phe Asn Cys Pro Val Asn Gly Thr Tyr Val Phe Ile Phe
            620                 625                 630

cac atg cta aag ctg gca gtg aat gtg cca ctg tat gtc aac ctc atg     2454
His Met Leu Lys Leu Ala Val Asn Val Pro Leu Tyr Val Asn Leu Met
        635                 640                 645

aag aat gaa gag gtc ttg gta tca gcc tat gcc aat gat ggt gct cca     2502
Lys Asn Glu Glu Val Leu Val Ser Ala Tyr Ala Asn Asp Gly Ala Pro
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Replacement Sheet

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    650                 655                 660

gac cat gaa act gct agc aat cat gca att ctt cag ctc ttc cag gga     2550
Asp His Glu Thr Ala Ser Asn His Ala Ile Leu Gln Leu Phe Gln Gly
665                 670                 675                 680

gac cag ata tgg tta cgt ctg cac agg gga gca att tat gga agt agc     2598
Asp Gln Ile Trp Leu Arg Leu His Arg Gly Ala Ile Tyr Gly Ser Ser
                685                 690                 695

tgg aaa tat tct acg ttt tca ggc tat ctt ctt tat caa gat tga         2643
Trp Lys Tyr Ser Thr Phe Ser Gly Tyr Leu Leu Tyr Gln Asp
            700                 705                 710
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<211> 710

<212> PRT

<213> Homo sapiens

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Val Lys Glu Ser Glu Ser Leu Met Glu Phe Ala Gln Pro Glu Ile Gln
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Pro Gln Glu Phe Leu Asn Arg Arg Tyr Met Thr Glu Val Asp Tyr Ser
        35                  40                  45

Asn Lys Gln Gly Glu Glu Gln Pro Trp Glu Ala Asp Tyr Ala Arg Lys
    50                  55                  60

Pro Asn Leu Pro Lys Arg Trp Asp Met Leu Thr Glu Pro Asp Gly Gln
65                  70                  75                  80

Glu Lys Lys Gln Glu Ser Phe Lys Ser Trp Glu Ala Ser Gly Lys His
                85                  90                  95

Gln Glu Val Ser Lys Pro Ala Val Ser Leu Glu Gln Arg Lys Gln Asp
            100                 105                 110

Thr Ser Lys Leu Arg Ser Thr Leu Pro Glu Glu Gln Lys Lys Gln Glu
        115                 120                 125
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Ile Ser Lys Ser Lys Pro Ser Pro Ser Gln Trp Lys Gln Asp Thr Pro
130 135 140

Lys Ser Lys Ala Gly Tyr Val Gln Glu Glu Gln Lys Lys Gln Glu Thr
145 150 155 160

Pro Lys Leu Trp Pro Val Gln Leu Gln Lys Glu Gln Asp Pro Lys Lys
165 170 175

Gln Thr Pro Lys Ser Trp Thr Pro Ser Met Gln Ser Glu Gln Asn Thr
180 185 190

Thr Lys Ser Trp Thr Thr Pro Met Cys Glu Glu Gln Asp Ser Lys Gln
195 200 205

Pro Glu Thr Pro Lys Ser Trp Glu Asn Asn Val Glu Ser Gln Lys His
210 215 220

Ser Leu Thr Ser Gln Ser Gln Ile Ser Pro Lys Ser Trp Gly Val Ala
225 230 235 240

Thr Ala Ser Leu Ile Pro Asn Asp Gln Leu Leu Pro Arg Lys Leu Asn
245 250 255

Thr Glu Pro Lys Asp Val Pro Lys Pro Val His Gln Pro Val Gly Ser
260 265 270

Ser Ser Thr Leu Pro Lys Asp Pro Val Leu Arg Lys Glu Lys Leu Gln
275 280 285

Asp Leu Met Thr Gln Ile Gln Gly Thr Cys Asn Phe Met Gln Glu Ser
290 295 300

Val Leu Asp Phe Asp Lys Pro Ser Ser Ala Ile Pro Thr Ser Gln Pro
305 310 315 320

Pro Ser Ala Thr Pro Gly Ser Pro Val Ala Ser Lys Glu Gln Asn Leu
325 330 335

Ser Ser Gln Ser Asp Phe Leu Gln Glu Pro Leu Gln Val Phe Asn Val
340 345 350

Asn Ala Pro Leu Pro Pro Arg Lys Glu Gln Glu Ile Lys Glu Ser Pro
355 360 365

Tyr Ser Pro Gly Tyr Asn Gln Ser Phe Thr Thr Ala Ser Thr Gln Thr
370 375 380

Pro Pro Gln Cys Gln Leu Pro Ser Ile His Val Glu Gln Thr Val His
385 390 395 400

Ser Gln Glu Thr Ala Ala Asn Tyr His Pro Asp Gly Thr Ile Gln Val
405 410 415

Ser Asn Gly Ser Leu Ala Phe Tyr Pro Ala Gln Thr Asn Val Phe Pro
420 425 430

Arg Pro Thr Gln Pro Phe Val Asn Ser Arg Gly Ser Val Arg Gly Cys
435 440 445

Thr Arg Gly Gly Arg Leu Ile Thr Asn Ser Tyr Arg Ser Pro Gly Gly
450 455 460

Tyr Lys Gly Phe Asp Thr Tyr Arg Gly Leu Pro Ser Ile Ser Asn Gly
465 470 475 480

Asn Tyr Ser Gln Leu Gln Phe Gln Ala Arg Glu Tyr Ser Gly Ala Pro
485 490 495

Tyr Ser Gln Arg Asp Asn Phe Gln Gln Cys Tyr Lys Arg Gly Gly Thr
500 505 510

Ser Gly Gly Pro Arg Ala Asn Ser Arg Ala Gly Trp Ser Asp Ser Ser
515 520 525

Gln Val Ser Ser Pro Glu Arg Asp Asn Glu Thr Phe Asn Ser Gly Asp
530 535 540

Ser Gly Gln Gly Asp Ser Arg Ser Met Thr Pro Val Asp Val Pro Val
545 550 555 560

Thr Asn Pro Ala Ala Thr Ile Leu Pro Val His Val Tyr Pro Leu Pro
565 570 575

Gln Gln Met Arg Val Ala Phe Ser Ala Ala Arg Thr Ser Asn Leu Ala
580 585 590

Pro Gly Thr Leu Asp Gln Pro Tyr Gly Val Asp Leu Leu Leu Asn Asn
595 600 605

Leu Gly Glu Thr Phe Asp Leu Gln Leu Gly Arg Phe Asn Cys Pro Val
610 615 620

Asn Gly Thr Tyr Val Phe Ile Phe His Met Leu Lys Leu Ala Val Asn
625 630 635 640

Val Pro Leu Tyr Val Asn Leu Met Lys Asn Glu Glu Val Leu Val Ser
645 650 655

Ala Tyr Ala Asn Asp Gly Ala Pro Asp His Glu Thr Ala Ser Asn His
660 665 670

Ala Ile Leu Gln Leu Phe Gln Gly Asp Gln Ile Trp Leu Arg Leu His
675 680 685

Arg Gly Ala Ile Tyr Gly Ser Ser Trp Lys Tyr Ser Thr Phe Ser Gly
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Tyr Leu Leu Tyr Gln Asp
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<211> 2133

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<213> Homo sapiens

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tatatgacag aagtagatta ttcaaacaaa caaggcgaag agcaaccttg ggaagcagat 180

tatgctagaa aaccaaatct cccaaaacgt tgggatatgc ttactgaacc agatggtcaa 240

gagaagaaac aggagtcctt taagtcctgg gaggcttctg gtaagcacca ggaggtatcc 300

aagcctgcag tttccttaga acagaggaaa caagacacct caaaactcag gtctactctg 360

ccggaagagc agaagaagca ggagatctcc aaatccaagc catctcctag ccagtggaag 420

caagatacac ctaaatccaa agcagggtat gttcaagagg aacaaaagaa acaggagaca 480

ccaaagctgt ggccagttca gctgcagaaa gaacaagatc caaagaagca aactccaaag 540

tcttggacac cttccatgca gagcgaacag aacaccacca agtcatggac cactcccatg 600

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agtcaaaaac actctttaac atcacagtca cagatttctc caaagtcctg gggagtagct 720

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gaacaagaaa taaaagaatc cccttattca cctggctaca atcaaagttt taccacagca 1140

agtacacaaa caccacccca gtgccaactg ccatctatac atgtagaaca aactgtccat 1200

tctcaagaga ctgcagcaaa ttatcatcct gatggaacta ttcaagtaag caatggtagc 1260

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aacagtggtg actctggaca aggagactcc cgtagcatga cccctgtgga tgtgccagtg 1680

acaaatccag cagccaccat actgccagta cacgtctacc ctctgcctca gcagatgcga 1740

gttgccttct cagcagccag aacctctaat ctggcccctg gaactttaga ccaaccttat 1800

ggtgttgatc ttcttctgaa caacttagga gaaacttttg atcttcagct tggtagattt 1860

aattgcccag tgaatggcac ttacgttttc atttttcaca tgctaaagct ggcagtgaat 1920

gtgccactgt atgtcaacct catgaagaat gaagaggtct tggtatcagc ctatgccaat 1980

gatggtgctc cagaccatga aactgctagc aatcatgcaa ttcttcagct cttccaggga 2040

gaccagatat ggttacgtct gcacagggga gcaatttatg gaagtagctg gaaatattct 2100

acgttttcag gctatcttct ttatcaagat tga 2133

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<211> 36

<212> PRT

<213> Homo sapiens

<400> 17

Pro Tyr Gly Val Asp Leu Leu Leu Asn Asn Leu Gly Glu Thr Phe Asp
1 5 10 15

Leu Gln Leu Gly Arg Phe Asn Cys Pro Val Asn Gly Thr Tyr Val Phe
20 25 30

Ile Phe His Met
35

<210> 18

<211> 22

<212> PRT

<213> Homo sapiens

<400> 18

Glu Thr Ala Ser Asn His Ala Ile Leu Gln Leu Phe Gln Gly Asp Gln
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Ile Trp Leu Arg Leu His
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<210> 19

<211> 20

<212> PRT

<213> Homo sapiens

<400> 19

Glu Thr Ala Ser Asn His Ala Ile Leu Gln Leu Phe Gln Gly Asp Gln
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Ile Trp Leu Arg
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<213> Homo sapiens

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Lys Tyr Ser Thr Phe Ser Gly Tyr Leu Leu Tyr
1 5 10

<210> 21

<211> 10

<212> PRT

<213> Homo sapiens

<400> 21

Ser Thr Phe Ser Gly Tyr Leu Leu Tyr Gln
1 5 10

<210> 22

<211> 20

<212> PRT

<213> Homo sapiens

<400> 22

Phe Asn Cys Pro Val Asn Gly Thr Tyr Val Phe Ile Phe His Met Leu
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Lys Leu Ala Val
20

<210> 23

<211> 815

<212> PRT

<213> Homo sapiens

<400> 23

Phe Asp Thr Tyr Arg Gly Leu Pro Ser Ile Ser Asn Gly Asn Tyr Ser
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Gln Leu Gln Phe Gln Ala Arg Glu Tyr Ser Gly Ala Pro Tyr Ser Gln
20 25 30

Arg Ile Ser Ala Ile Thr Thr Val Ser Val Ala Trp Lys Val Leu Ser
35 40 45

Gly Lys Ile Gly Glu Gly Ala Glu Gly Asn Cys Lys Cys Val Ile Ser
50 55 60

Glu Gly Ala Trp Ala Val Cys Pro Thr Gln Pro Cys Gly Lys Ala Lys
65 70 75 80

Pro Asp Lys His Leu Lys Asp Leu Leu Ser Lys Leu Leu Asn Ser Gly
85 90 95

Tyr Phe Glu Ser Ile Pro Val Pro Lys Asn Ala Lys Glu Lys Glu Val
100 105 110

Pro Leu Glu Glu Glu Met Leu Ile Gln Ser Glu Lys Lys Thr Gln Leu
115 120 125

Ser Lys Thr Glu Ser Val Lys Glu Ser Glu Ser Leu Met Glu Phe Ala
130 135 140

Gln Pro Glu Ile Gln Pro Gln Glu Phe Leu Asn Arg Arg Tyr Met Thr

Replacement Sheet

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145                 150                 155                 160

Glu Val Asp Tyr Ser Asn Lys Gln Gly Glu Glu Gln Pro Trp Glu Ala
                165                 170                 175

Asp Tyr Ala Arg Lys Pro Asn Leu Pro Lys Arg Trp Asp Met Leu Thr
            180                 185                 190

Glu Pro Asp Gly Gln Glu Lys Lys Gln Glu Ser Phe Lys Ser Trp Glu
        195                 200                 205

Ala Ser Gly Lys His Gln Glu Val Ser Lys Pro Ala Val Ser Leu Glu
    210                 215                 220

Gln Arg Lys Gln Asp Thr Ser Lys Leu Arg Ser Thr Leu Pro Glu Glu
225                 230                 235                 240

Gln Lys Lys Gln Glu Ile Ser Lys Ser Lys Pro Ser Pro Ser Gln Trp
                245                 250                 255

Lys Gln Asp Thr Pro Lys Ser Lys Ala Gly Tyr Val Gln Glu Glu His
            260                 265                 270

Lys Lys Gln Glu Thr Pro Lys Leu Trp Pro Val Gln Leu Gln Lys Glu
        275                 280                 285

Gln Asp Pro Lys Lys Gln Thr Pro Lys Ser Trp Thr Pro Ser Met Gln
    290                 295                 300

Ser Glu Gln Asn Thr Thr Lys Ser Trp Thr Thr Pro Met Cys Glu Glu
305                 310                 315                 320

Gln Asp Ser Lys Gln Pro Glu Thr Pro Lys Ser Trp Glu Asn Asn Val
                325                 330                 335

Glu Ser Gln Lys His Ser Leu Thr Ser Gln Ser Gln Ile Ser Pro Lys
            340                 345                 350

Ser Trp Gly Val Ala Thr Ala Ser Leu Ile Pro Asn Asp Gln Leu Leu
        355                 360                 365

Pro Arg Lys Leu Asn Thr Glu Pro Lys Asp Val Pro Ile Ala Cys Ala
    370                 375                 380
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Ser Ala Gly Phe Leu Pro Leu Gln Pro Pro Phe Arg Arg Ile His Val
385 390 395 400

Leu Arg Lys Glu Lys Leu Gln Asp Leu Met Thr Gln Ile Gln Gly Thr
405 410 415

Cys Asn Phe Met Gln Glu Ser Val Leu Asp Phe Asp Lys Pro Ser Ser
420 425 430

Ala Ile Pro Thr Ser Gln Pro Pro Ser Ala Thr Pro Gly Pro Arg Arg
435 440 445

His Leu Lys Glu Gln Asn Leu Ser Val Lys Val Ile Phe Phe Gln Gly
450 455 460

Ala Val Thr Val Phe Asn Val Asn Ala Pro Leu Pro Pro Arg Lys Glu
465 470 475 480

Gln Glu Ile Lys Glu Ser Pro Tyr Ser Pro Gly Tyr Asn Gln Ser Phe
485 490 495

Thr Thr Ala Ser Thr Gln Thr Pro Pro Gln Cys Gln Leu Pro Ser Ile
500 505 510

His Val Glu Gln Thr Val His Ser Gln Glu Thr Ala Asn Tyr His Pro
515 520 525

Asp Gly Thr Ile Gln Val Ser Asn Gly Ser Leu Ala Phe Tyr Pro Ala
530 535 540

Gln Thr Asn Val Phe Pro Arg Pro Thr Gln Pro Phe Val Asn Ser Arg
545 550 555 560

Gly Ser Val Arg Gly Cys Thr Arg Gly Gly Arg Leu Ile Thr Asn Ser
565 570 575

Tyr Arg Ser Pro Gly Gly Tyr Lys Gly Phe Asp Thr Tyr Arg Gly Leu
580 585 590

Pro Ser Ile Ser Asn Gly Asn Tyr Ser Gln Leu Gln Phe Gln Ala Arg
595 600 605

Glu Tyr Ser Gly Ala Pro Tyr Ser Gln Arg Asp Asn Phe Gln Gln Cys
610 615 620

Tyr Lys Arg Gly Gly Thr Ser Gly Gly Pro Arg Ala Asn Ser Arg Ala
625 630 635 640

Gly Trp Ser Asp Ser Ser Gln Val Ser Ser Pro Glu Arg Asp Asn Glu
645 650 655

Thr Phe Asn Ser Gly Asp Ser Gly Gln Gly Asp Ser Arg Ser Met Thr
660 665 670

Pro Val Asp Val Pro Val Thr Asn Pro Ala Ala Thr Ile Leu Pro Val
675 680 685

His Val Tyr Pro Leu Pro Gln Gln Met Arg Val Ala Phe Ser Ala Ala
690 695 700

Arg Thr Ser Asn Leu Ala Pro Gly Thr Leu Asp Gln Pro Ile Val Phe
705 710 715 720

Asp Leu Leu Leu Asn Asn Leu Gly Glu Thr Phe Asp Leu Gln Leu Gly
725 730 735

Arg Phe Asn Cys Pro Val Asn Gly Thr Tyr Val Phe Ile Phe His Met
740 745 750

Leu Lys Leu Ala Val Asn Val Pro Leu Tyr Val Asn Leu Met Lys Asn
755 760 765

Glu Glu Val Leu Val Ser Ala Tyr Ala Asn Asp Gly Ala Pro Asp His
770 775 780

Glu Thr Ala Ser Asn His Ala Ile Leu Gln Leu Phe Gln Gly Asp Gln
785 790 795 800

Ile Trp Leu Arg Leu His Arg Gly Ala Ile Tyr Gly Ser Ser Trp
805 810 815

<210> 24

<211> 185

<212> PRT

<213> Homo sapiens

<400> 24

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Gly Ala Ser Pro Asn Gln Gly Gln Asn Arg Pro His Ala Arg Gln Arg
1               5                  10                  15

Ala Pro Pro Gln Gly Pro Pro Gly Glu Pro Glu Arg Arg Ala Pro Leu
            20                  25                  30

Pro Ser Gly His Gly Glu Pro Cys Arg His Arg Pro Pro Pro Phe Pro
        35                  40                  45

Gln Pro Pro Ala Gly Thr Gln Lys Pro Leu Leu Gln Gly Pro Gly Gly
    50                  55                  60

Gly Pro Ala Glu Asn Ala Pro Thr Ala Ala Leu Gly Ser Pro Ala Pro
65                  70                  75                  80

Pro Arg Gly Cys Gln Ala Ala Pro Pro Pro Arg Ser Gly Ala Gly Arg
                85                  90                  95

Pro Asp Leu Pro Thr Leu Ala Gly Pro Arg Pro Ala Pro Ala Pro Pro
            100                 105                 110

Pro Ser Ala Ala Pro Pro Pro Pro Pro Ser Gly Ala Pro Ser Arg Pro
        115                 120                 125

Ala Ala Gly Arg Gln Arg Leu Ser Gly Val Ser Ser Gly Pro Ser Leu
    130                 135                 140

Gly Trp Trp Val Gly Arg Gly Arg Gly Leu Pro Ala Phe Ala Gln Ile
145                 150                 155                 160

Ala Gly His Gln Val Gly Pro Arg Arg Arg Arg Thr Pro Ala Gly Arg
                165                 170                 175

Lys Pro Arg Ser Pro Ala Gly Pro Arg
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<210> 25

<211> 475

<212> DNA

<213> Homo sapiens

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<221> misc_feature

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cagggaagcc tggtgccctt ggtcctcaag gccagcctgg ccttccagga cccccaggcc 180

ctccaggacc tccaggaccc ccagctgtga tgccccctac accaccaccc cagggagagt 240

atctgccaaa tatggggctg ggaattgatg gcgtgaaacc cccccatgcc tacggggcta 300

agaaaggcaa gaatggaggg ccagcctatg agatgcctgc atttaccgcc gagctaaccg 360

caccttttccc accggtgggg gccccagtga agtttaacaa actgctgtat aacggcagac 420

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<210> 26

<211> 3443

<212> DNA

<213> Homo sapiens

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gcagagcagc atctgctgaa gagacagaaa ccagccccag aggtgtcaca ggaaggcacc 180

agcaaggaca ttggtctttg atttgattca gcagtcctgt caagtataaa tgtgatggct 240

gtgctgcctg gccctctgca gctgctggga gtgctgctta ccatttccct gagttccatc 300

aggctcattc aggctggtgc ctactatggg atcaagccgc tgccacctca aattcctcct 360

cagatgccac cacaaattcc acaataccag cccctgggtc agcaagtacc tcacatgcct 420

ttggccaaag atggccttgc catgggcaag gagatgcccc acttgcagta tggcaaagag 480

tatccacacc taccccaata tatgaaggaa attcaaccgg cgccaagaat gggcaaggaa 540

gccgttccca agaaaggcaa agaaatacca ttagccagtt tacgagggga acaaggtccc 600

cgtggagagc ctggcccaag aggaccacct gggccccctg gtttaccagg tcatgggata 660

cctggaatta aaggaaaacc agggccacag ggatatccag gagttggaaa gccaggtatg 720

cctggaatgc cagggaagcc aggagccatg ggcatgcctg gggcaaaagg agaaattgga 780

cagaaagggg aaattgggcc tatggggatc ccatgaccac aaggacctcc agggcctcat 840

ggacttcctg gcattgggaa gccaggtggg ccagggttac cagggcaacc aggaccaaag 900

ggtgatcgag gacccaaagg actaccagga cctcaaggcc ttcggggtcc taaaggagac 960

aagggcttcg ggatgccagg tgcgccaggt gtaaaggggc ctccagggat gcacggccct 1020

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aagggagaac caggaatccc aggggatcag ggtttacagg gccccccagg tatcccaggg 1740

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cggtaattaa ctcacttgtt ccccagagtt tctatttgtt ttgattttct ttttctgtga 3300

cttattttcc tattttcttt cctccatgta attttcacta tggcccaact aatataaaca 3360

cctggaaatt acaaggaaaa aaaattcttc ctctaataac tttccaaatt tgtggaatat 3420

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<211> 2487

<212> DNA

<213> Homo sapiens

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<222> (235)..(2469)

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<400> 27

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gcagagcagc atctgctgaa gagacagaaa ccagccccag aggtgtcaca ggaaggcacc    180

agcaaggaca ttggtctttg atttgattca gcagtcctgt caagtataaa tgtg atg      237
                                                            Met
                                                            1

gct gtg ctg cct ggc cct ctg cag ctg ctg gga gtg ctg ctt acc att      285
Ala Val Leu Pro Gly Pro Leu Gln Leu Leu Gly Val Leu Leu Thr Ile
            5                  10                  15

tcc ctg agt tcc atc agg ctc att cag gct ggt gcc tac tat ggg atc      333
Ser Leu Ser Ser Ile Arg Leu Ile Gln Ala Gly Ala Tyr Tyr Gly Ile
        20                  25                  30

aag ccg ctg cca cct caa att cct cct cag atg cca cca caa att cca      381
Lys Pro Leu Pro Pro Gln Ile Pro Pro Gln Met Pro Pro Gln Ile Pro
    35                  40                  45

caa tac cag ccc ctg ggt cag caa gta cct cac atg cct ttg gcc aaa      429
Gln Tyr Gln Pro Leu Gly Gln Gln Val Pro His Met Pro Leu Ala Lys
50                  55                  60                  65

gat ggc ctc gcc atg ggc aag gag atg ccc cac ttg cag tat ggc aaa      477
Asp Gly Leu Ala Met Gly Lys Glu Met Pro His Leu Gln Tyr Gly Lys
                70                  75                  80

gag tat cca cac cta ccc caa tat atg aag gaa att caa ccg gcg cca      525
Glu Tyr Pro His Leu Pro Gln Tyr Met Lys Glu Ile Gln Pro Ala Pro
            85                  90                  95

aga atg ggc aag gaa gcc gtt ccc aag aaa ggc aaa gaa ata cca tta      573
Arg Met Gly Lys Glu Ala Val Pro Lys Lys Gly Lys Glu Ile Pro Leu
        100                 105                 110

gcc agt tta cga ggg gaa caa ggt ccc cgt gga gag cct ggc cca aga      621
Ala Ser Leu Arg Gly Glu Gln Gly Pro Arg Gly Glu Pro Gly Pro Arg
    115                 120                 125
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gga cca cct ggg ccc cct ggt tta cca ggt cat ggg ata cct gga att      669
Gly Pro Pro Gly Pro Pro Gly Leu Pro Gly His Gly Ile Pro Gly Ile
130                 135                 140                 145

aaa gga aaa cca ggg cca cag gga tat cca gga gtt gga aag cca ggt      717
Lys Gly Lys Pro Gly Pro Gln Gly Tyr Pro Gly Val Gly Lys Pro Gly
                150                 155                 160

atg cct gga atg cca ggg aag cca gga gcc atg ggc atg cct ggg gca      765
Met Pro Gly Met Pro Gly Lys Pro Gly Ala Met Gly Met Pro Gly Ala
            165                 170                 175

aaa gga gaa att gga cag aaa ggg gaa att ggg cct atg ggg atc cca      813
Lys Gly Glu Ile Gly Gln Lys Gly Glu Ile Gly Pro Met Gly Ile Pro
        180                 185                 190

gga cca caa gga cct cca ggg cct cat gga ctt cct ggc att ggg aag      861
Gly Pro Gln Gly Pro Pro Gly Pro His Gly Leu Pro Gly Ile Gly Lys
    195                 200                 205

cca ggt ggg cca ggg tta cca ggg caa cca gga cca aag ggt gat cga      909
Pro Gly Gly Pro Gly Leu Pro Gly Gln Pro Gly Pro Lys Gly Asp Arg
210                 215                 220                 225

gga ccc aaa gga cta cca gga cct caa ggc ctt cgg ggt cct aaa gga      957
Gly Pro Lys Gly Leu Pro Gly Pro Gln Gly Leu Arg Gly Pro Lys Gly
                230                 235                 240

gac aag ggc ttc ggg atg cca ggt gcg cca ggt gta aag ggg cct cca     1005
Asp Lys Gly Phe Gly Met Pro Gly Ala Pro Gly Val Lys Gly Pro Pro
            245                 250                 255

ggg atg cac ggc cct ccc ggc cct gtt gga ctg cca gga gtg ggc aaa     1053
Gly Met His Gly Pro Pro Gly Pro Val Gly Leu Pro Gly Val Gly Lys
        260                 265                 270

cca gga gtg aca ggc ttc cct ggg ccc cag ggc ccc ctg gga aag cca     1101
Pro Gly Val Thr Gly Phe Pro Gly Pro Gln Gly Pro Leu Gly Lys Pro
    275                 280                 285

ggg gct cca gga gaa cct ggg cca caa ggc cct att ggg gta ccg ggg     1149
Gly Ala Pro Gly Glu Pro Gly Pro Gln Gly Pro Ile Gly Val Pro Gly
290                 295                 300                 305

gtt caa gga cct cct ggg ata ccc gga att gga aag cca ggc cag gat     1197
Val Gln Gly Pro Pro Gly Ile Pro Gly Ile Gly Lys Pro Gly Gln Asp
                310                 315                 320

ggg atc cca ggc cag cca gga ttt cca ggt ggc aaa ggg gag caa gga     1245
Gly Ile Pro Gly Gln Pro Gly Phe Pro Gly Gly Lys Gly Glu Gln Gly
            325                 330                 335

ctg cca ggg cta cca gga ccc cca ggc ctt cca ggg att ggg aaa cca     1293
Leu Pro Gly Leu Pro Gly Pro Pro Gly Leu Pro Gly Ile Gly Lys Pro
        340                 345                 350

ggc ttc cca gga ccc aaa ggt gac cgg ggc atg gga ggt gtt cct ggg     1341
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Gly Phe Pro Gly Pro Lys Gly Asp Arg Gly Met Gly Gly Val Pro Gly
    355                 360                 365

gct ctt gga cca aga ggg gag aaa gga cca ata ggt gcc cca gga ata     1389
Ala Leu Gly Pro Arg Gly Glu Lys Gly Pro Ile Gly Ala Pro Gly Ile
370                 375                 380                 385

ggg ggt cct cca gga gag cca ggc ctg cct gga atc cca ggt cct atg     1437
Gly Gly Pro Pro Gly Glu Pro Gly Leu Pro Gly Ile Pro Gly Pro Met
                390                 395                 400

ggc cct cca ggt gct att ggt ttt cct gga ccc aaa gga gaa ggt ggg     1485
Gly Pro Pro Gly Ala Ile Gly Phe Pro Gly Pro Lys Gly Glu Gly Gly
            405                 410                 415

att gta ggg cca cag ggg cca cca ggt ccc aag ggt gag cca ggg ctt     1533
Ile Val Gly Pro Gln Gly Pro Pro Gly Pro Lys Gly Glu Pro Gly Leu
        420                 425                 430

caa ggc ttc cca gga aag cca ggt ttc ctt ggt gaa gta ggg cct cct     1581
Gln Gly Phe Pro Gly Lys Pro Gly Phe Leu Gly Glu Val Gly Pro Pro
    435                 440                 445

ggc atg agg ggt ttc cca ggt ccc ata ggc ccc aag ggg gaa cat ggg     1629
Gly Met Arg Gly Phe Pro Gly Pro Ile Gly Pro Lys Gly Glu His Gly
450                 455                 460                 465

caa aaa ggt gta cca gga ctc cct ggt gtt cca ggg ctt ctc gga cct     1677
Gln Lys Gly Val Pro Gly Leu Pro Gly Val Pro Gly Leu Leu Gly Pro
                470                 475                 480

aag gga gaa cca gga atc cca ggg gat cag ggt tta cag ggc ccc cca     1725
Lys Gly Glu Pro Gly Ile Pro Gly Asp Gln Gly Leu Gln Gly Pro Pro
            485                 490                 495

ggt atc cca ggg att ggg ggc cct agt ggc ccc att gga cca cct ggg     1773
Gly Ile Pro Gly Ile Gly Gly Pro Ser Gly Pro Ile Gly Pro Pro Gly
        500                 505                 510

att cca ggc ccc aaa ggg gag cct ggc ctc cca ggg ccc cct ggg ttc     1821
Ile Pro Gly Pro Lys Gly Glu Pro Gly Leu Pro Gly Pro Pro Gly Phe
    515                 520                 525

cct ggt ata ggg aaa ccc gga gtg gca gga ctt cat ggc ccc cca ggg     1869
Pro Gly Ile Gly Lys Pro Gly Val Ala Gly Leu His Gly Pro Pro Gly
530                 535                 540                 545

aag cct ggt gcc ctt ggt cct caa ggc cag cct ggc ctt cca gga ccc     1917
Lys Pro Gly Ala Leu Gly Pro Gln Gly Gln Pro Gly Leu Pro Gly Pro
                550                 555                 560

cca ggc cct cca gga cct cca gga ccc cca gct gtg atg ccc cct aca     1965
Pro Gly Pro Pro Gly Pro Pro Gly Pro Pro Ala Val Met Pro Pro Thr
            565                 570                 575

cca cca ccc cag gga gag tat ctg cca gat atg ggg ctg gga att gat     2013
Pro Pro Pro Gln Gly Glu Tyr Leu Pro Asp Met Gly Leu Gly Ile Asp
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Replacement Sheet

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ggc gtg aaa ccc ccc cat gcc tac ggg gct aag aaa ggc aag aat gga     2061
Gly Val Lys Pro Pro His Ala Tyr Gly Ala Lys Lys Gly Lys Asn Gly
    595                 600                 605

ggg cca gcc tat gag atg cct gca ttt acc gcc gag cta acc gca cct     2109
Gly Pro Ala Tyr Glu Met Pro Ala Phe Thr Ala Glu Leu Thr Ala Pro
610                 615                 620                 625

ttc cca ccg gtg ggg gcc cca gtg aag ttt aac aaa ctg ctg tat aac     2157
Phe Pro Pro Val Gly Ala Pro Val Lys Phe Asn Lys Leu Leu Tyr Asn
                630                 635                 640

ggc aga cag aac tac aac ccg cag aca ggc atc ttc acc tgt gag gtc     2205
Gly Arg Gln Asn Tyr Asn Pro Gln Thr Gly Ile Phe Thr Cys Glu Val
            645                 650                 655

cct ggt gtc tac tac ttt gca tac cac gtt cac tgc aag ggg ggc aac     2253
Pro Gly Val Tyr Tyr Phe Ala Tyr His Val His Cys Lys Gly Gly Asn
        660                 665                 670

gtg tgg gtt gct cta ttc aag aac aac gag ccc gtg atg tac acg tac     2301
Val Trp Val Ala Leu Phe Lys Asn Asn Glu Pro Val Met Tyr Thr Tyr
    675                 680                 685

gac gag tac aaa aag ggc ttc ctg gac cag gca tct ggg agt gca gtg     2349
Asp Glu Tyr Lys Lys Gly Phe Leu Asp Gln Ala Ser Gly Ser Ala Val
690                 695                 700                 705

ctg ctg ctc agg ccc gga gac cgg gtg ttc ctc cag atg ccc tca gaa     2397
Leu Leu Leu Arg Pro Gly Asp Arg Val Phe Leu Gln Met Pro Ser Glu
                710                 715                 720

cag gct gca gga ctg tat gcc ggg cag tat gtc cac tcc tcc ttt tca     2445
Gln Ala Ala Gly Leu Tyr Ala Gly Gln Tyr Val His Ser Ser Phe Ser
            725                 730                 735

gga tat tta ttg tat ccc atg taa aaacaaaaaa aaaaaaaa                 2487
Gly Tyr Leu Leu Tyr Pro Met
        740


<210>  28

<211>  744

<212>  PRT

<213>  Homo sapiens


<400>  28

Met Ala Val Leu Pro Gly Pro Leu Gln Leu Leu Gly Val Leu Leu Thr
1               5                   10                  15
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Ile Ser Leu Ser Ser Ile Arg Leu Ile Gln Ala Gly Ala Tyr Tyr Gly
20 25 30

Ile Lys Pro Leu Pro Pro Gln Ile Pro Pro Gln Met Pro Pro Gln Ile
35 40 45

Pro Gln Tyr Gln Pro Leu Gly Gln Gln Val Pro His Met Pro Leu Ala
50 55 60

Lys Asp Gly Leu Ala Met Gly Lys Glu Met Pro His Leu Gln Tyr Gly
65 70 75 80

Lys Glu Tyr Pro His Leu Pro Gln Tyr Met Lys Glu Ile Gln Pro Ala
85 90 95

Pro Arg Met Gly Lys Glu Ala Val Pro Lys Lys Gly Lys Glu Ile Pro
100 105 110

Leu Ala Ser Leu Arg Gly Glu Gln Gly Pro Arg Gly Glu Pro Gly Pro
115 120 125

Arg Gly Pro Pro Gly Pro Pro Gly Leu Pro Gly His Gly Ile Pro Gly
130 135 140

Ile Lys Gly Lys Pro Gly Pro Gln Gly Tyr Pro Gly Val Gly Lys Pro
145 150 155 160

Gly Met Pro Gly Met Pro Gly Lys Pro Gly Ala Met Gly Met Pro Gly
165 170 175

Ala Lys Gly Glu Ile Gly Gln Lys Gly Glu Ile Gly Pro Met Gly Ile
180 185 190

Pro Gly Pro Gln Gly Pro Pro Gly Pro His Gly Leu Pro Gly Ile Gly
195 200 205

Lys Pro Gly Gly Pro Gly Leu Pro Gly Gln Pro Gly Pro Lys Gly Asp
210 215 220

Arg Gly Pro Lys Gly Leu Pro Gly Pro Gln Gly Leu Arg Gly Pro Lys
225 230 235 240

Gly Asp Lys Gly Phe Gly Met Pro Gly Ala Pro Gly Val Lys Gly Pro
245 250 255

Pro Gly Met His Gly Pro Pro Gly Pro Val Gly Leu Pro Gly Val Gly
260 265 270

Lys Pro Gly Val Thr Gly Phe Pro Gly Pro Gln Gly Pro Leu Gly Lys
275 280 285

Pro Gly Ala Pro Gly Glu Pro Gly Pro Gln Gly Pro Ile Gly Val Pro
290 295 300

Gly Val Gln Gly Pro Pro Gly Ile Pro Gly Ile Gly Lys Pro Gly Gln
305 310 315 320

Asp Gly Ile Pro Gly Gln Pro Gly Phe Pro Gly Gly Lys Gly Glu Gln
325 330 335

Gly Leu Pro Gly Leu Pro Gly Pro Pro Gly Leu Pro Gly Ile Gly Lys
340 345 350

Pro Gly Phe Pro Gly Pro Lys Gly Asp Arg Gly Met Gly Gly Val Pro
355 360 365

Gly Ala Leu Gly Pro Arg Gly Glu Lys Gly Pro Ile Gly Ala Pro Gly
370 375 380

Ile Gly Gly Pro Pro Gly Glu Pro Gly Leu Pro Gly Ile Pro Gly Pro
385 390 395 400

Met Gly Pro Pro Gly Ala Ile Gly Phe Pro Gly Pro Lys Gly Glu Gly
405 410 415

Gly Ile Val Gly Pro Gln Gly Pro Pro Gly Pro Lys Gly Glu Pro Gly
420 425 430

Leu Gln Gly Phe Pro Gly Lys Pro Gly Phe Leu Gly Glu Val Gly Pro
435 440 445

Pro Gly Met Arg Gly Phe Pro Gly Pro Ile Gly Pro Lys Gly Glu His
450 455 460

Patent Scrambler

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Gly Gln Lys Gly Val Pro Gly Leu Pro Gly Val Pro Gly Leu Leu Gly
465                 470                 475                 480

Pro Lys Gly Glu Pro Gly Ile Pro Gly Asp Gln Gly Leu Gln Gly Pro
                485                 490                 495

Pro Gly Ile Pro Gly Ile Gly Gly Pro Ser Gly Pro Ile Gly Pro Pro
            500                 505                 510

Gly Ile Pro Gly Pro Lys Gly Glu Pro Gly Leu Pro Gly Pro Pro Gly
        515                 520                 525

Phe Pro Gly Ile Gly Lys Pro Gly Val Ala Gly Leu His Gly Pro Pro
    530                 535                 540

Gly Lys Pro Gly Ala Leu Gly Pro Gln Gly Gln Pro Gly Leu Pro Gly
545                 550                 555                 560

Pro Pro Gly Pro Pro Gly Pro Pro Gly Pro Pro Ala Val Met Pro Pro
                565                 570                 575

Thr Pro Pro Pro Gln Gly Glu Tyr Leu Pro Asp Met Gly Leu Gly Ile
            580                 585                 590

Asp Gly Val Lys Pro Pro His Ala Tyr Gly Ala Lys Lys Gly Lys Asn
        595                 600                 605

Gly Gly Pro Ala Tyr Glu Met Pro Ala Phe Thr Ala Glu Leu Thr Ala
    610                 615                 620

Pro Phe Pro Pro Val Gly Ala Pro Val Lys Phe Asn Lys Leu Leu Tyr
625                 630                 635                 640

Asn Gly Arg Gln Asn Tyr Asn Pro Gln Thr Gly Ile Phe Thr Cys Glu
                645                 650                 655

Val Pro Gly Val Tyr Tyr Phe Ala Tyr His Val His Cys Lys Gly Gly
            660                 665                 670

Asn Val Trp Val Ala Leu Phe Lys Asn Asn Glu Pro Val Met Tyr Thr
        675                 680                 685

Tyr Asp Glu Tyr Lys Lys Gly Phe Leu Asp Gln Ala Ser Gly Ser Ala
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690 695 700

Val Leu Leu Leu Arg Pro Gly Asp Arg Val Phe Leu Gln Met Pro Ser
705 710 715 720

Glu Gln Ala Ala Gly Leu Tyr Ala Gly Gln Tyr Val His Ser Ser Phe
725 730 735

Ser Gly Tyr Leu Leu Tyr Pro Met
740

<210> 29

<211> 2235

<212> DNA

<213> Homo sapiens

<400> 29
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tccatcaggc tcattcaggc tggtgcctac tatgggatca agccgctgcc acctcaaatt 120

cctcctcaga tgccaccaca aattccacaa taccagcccc tgggtcagca agtacctcac 180

atgcctttgg ccaaagatgg cctcgccatg ggcaaggaga tgccccactt gcagtatggc 240

aaagagtatc cacacctacc ccaatatatg aaggaaattc aaccggcgcc aagaatgggc 300

aaggaagccg ttcccaagaa aggcaaagaa ataccattag ccagtttacg aggggaacaa 360

ggtccccgtg gagagcctgg cccaagagga ccacctgggc cccctggttt accaggtcat 420

gggatacctg gaattaaagg aaaaccaggg ccacagggat atccaggagt tggaaagcca 480

ggtatgcctg gaatgccagg gaagccagga gccatgggca tgcctggggc aaaaggagaa 540

attggacaga aaggggaaat tgggcctatg gggatcccag gaccacaagg acctccaggg 600

cctcatggac ttcctggcat tgggaagcca ggtgggccag ggttaccagg gcaaccagga 660

ccaaagggtg atcgaggacc caaaggacta ccaggacctc aaggccttcg gggtcctaaa 720

ggagacaagg gcttcgggat gccaggtgcg ccaggtgtaa aggggcctcc agggatgcac 780

ggccctcccg gccctgttgg actgccagga gtgggcaaac caggagtgac aggcttccct 840

gggccccagg gccccctggg aaagccaggg gctccaggag aacctgggcc acaaggccct 900

attggggtac cgggggttca aggacctcct gggatacccg gaattggaaa gccaggccag 960

gatgggatcc caggccagcc aggatttcca ggtggcaaag gggagcaagg actgccaggg 1020

ctaccaggac ccccaggcct tccagggatt gggaaaccag gcttcccagg acccaaaggt 1080

gaccggggca tgggaggtgt tcctggggct cttggaccaa gaggggagaa aggaccaata 1140

ggtgccccag gaataggggg tcctccagga gagccaggcc tgcctggaat cccaggtcct 1200

atgggccctc caggtgctat tggttttcct ggacccaaag gagaaggtgg gattgtaggg 1260

ccacaggggc caccaggtcc caagggtgag ccagggcttc aaggcttccc aggaaagcca 1320

ggtttccttg gtgaagtagg gcctcctggc atgaggggtt tcccaggtcc cataggcccc 1380

aaggggggaac atgggcaaaa aggtgtacca ggactccctg gtgttccagg gcttctcgga 1440

cctaagggag aaccaggaat cccaggggat cagggtttac agggcccccc aggtatccca 1500

gggattgggg gccctagtgg ccccattgga ccacctggga ttccaggccc caaaggggag 1560

cctggcctcc cagggccccc tgggttccct ggtataggga aacccggagt ggcaggactt 1620

catggccccc cagggaagcc tggtgccctt ggtcctcaag gccagcctgg ccttccagga 1680

cccccaggcc ctccaggacc tccaggaccc ccagctgtga tgccccctac accaccaccc 1740

cagggagagt atctgccaga tatggggctg ggaattgatg gcgtgaaacc cccccatgcc 1800

tacggggcta agaaaggcaa gaatggaggg ccagcctatg agatgcctgc atttaccgcc 1860

gagctaaccg caccttttccc accggtgggg gccccagtga agtttaacaa actgctgtat 1920

aacggcagac agaactacaa cccgcagaca ggcatcttca cctgtgaggt ccctggtgtc 1980

tactactttg cataccacgt tcactgcaag gggggcaacg tgtgggttgc tctattcaag 2040

aacaacgagc ccgtgatgta cacgtacgac gagtacaaaa agggcttcct ggaccaggca 2100

tctgggagtg cagtgctgct gctcaggccc ggagaccggg tgttcctcca gatgccctca 2160

gaacaggctg caggactgta tgccgggcag tatgtccact cctccttttc aggatattta 2220

ttgtatccca tgtaa 2235

<210> 30

<211> 27

<212> PRT

<213> Homo sapiens

<400> 30

Met Ala Val Leu Pro Gly Pro Leu Gln Leu Leu Gly Val Leu Leu Thr
1 5 10 15

Ile Ser Leu Ser Ser Ile Arg Leu Ile Gln Ala
20 25

<210> 31

<211> 717

<212> PRT

<213> Homo sapiens

<400> 31

Gly Ala Tyr Tyr Gly Ile Lys Pro Leu Pro Pro Gln Ile Pro Pro Gln
1 5 10 15

Met Pro Pro Gln Ile Pro Gln Tyr Gln Pro Leu Gly Gln Gln Val Pro
20 25 30

His Met Pro Leu Ala Lys Asp Gly Leu Ala Met Gly Lys Glu Met Pro
35 40 45

His Leu Gln Tyr Gly Lys Glu Tyr Pro His Leu Pro Gln Tyr Met Lys
50 55 60

Glu Ile Gln Pro Ala Pro Arg Met Gly Lys Glu Ala Val Pro Lys Lys
65 70 75 80

Gly Lys Glu Ile Pro Leu Ala Ser Leu Arg Gly Glu Gln Gly Pro Arg
85 90 95

Gly Glu Pro Gly Pro Arg Gly Pro Pro Gly Pro Pro Gly Leu Pro Gly
100 105 110

His Gly Ile Pro Gly Ile Lys Gly Lys Pro Gly Pro Gln Gly Tyr Pro
115 120 125

Gly Val Gly Lys Pro Gly Met Pro Gly Met Pro Gly Lys Pro Gly Ala
130 135 140

Met Gly Met Pro Gly Ala Lys Gly Glu Ile Gly Gln Lys Gly Glu Ile
145 150 155 160

Gly Pro Met Gly Ile Pro Gly Pro Gln Gly Pro Pro Gly Pro His Gly
165 170 175

Leu Pro Gly Ile Gly Lys Pro Gly Gly Pro Gly Leu Pro Gly Gln Pro
180 185 190

Gly Pro Lys Gly Asp Arg Gly Pro Lys Gly Leu Pro Gly Pro Gln Gly
195 200 205

Leu Arg Gly Pro Lys Gly Asp Lys Gly Phe Gly Met Pro Gly Ala Pro
210 215 220

Gly Val Lys Gly Pro Pro Gly Met His Gly Pro Pro Gly Pro Val Gly
225 230 235 240

Leu Pro Gly Val Gly Lys Pro Gly Val Thr Gly Phe Pro Gly Pro Gln
245 250 255

Gly Pro Leu Gly Lys Pro Gly Ala Pro Gly Glu Pro Gly Pro Gln Gly
260 265 270

Pro Ile Gly Val Pro Gly Val Gln Gly Pro Pro Gly Ile Pro Gly Ile
275 280 285

Gly Lys Pro Gly Gln Asp Gly Ile Pro Gly Gln Pro Gly Phe Pro Gly
290 295 300

Gly Lys Gly Glu Gln Gly Leu Pro Gly Leu Pro Gly Pro Pro Gly Leu
305 310 315 320

Pro Gly Ile Gly Lys Pro Gly Phe Pro Gly Pro Lys Gly Asp Arg Gly
325 330 335

Met Gly Gly Val Pro Gly Ala Leu Gly Pro Arg Gly Glu Lys Gly Pro
340 345 350

Ile Gly Ala Pro Gly Ile Gly Gly Pro Pro Gly Glu Pro Gly Leu Pro
355 360 365

Gly Ile Pro Gly Pro Met Gly Pro Pro Gly Ala Ile Gly Phe Pro Gly

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    370                 375                 380

Pro Lys Gly Glu Gly Gly Ile Val Gly Pro Gln Gly Pro Pro Gly Pro
385                 390                 395                 400

Lys Gly Glu Pro Gly Leu Gln Gly Phe Pro Gly Lys Pro Gly Phe Leu
                405                 410                 415

Gly Glu Val Gly Pro Pro Gly Met Arg Gly Phe Pro Gly Pro Ile Gly
            420                 425                 430

Pro Lys Gly Glu His Gly Gln Lys Gly Val Pro Gly Leu Pro Gly Val
        435                 440                 445

Pro Gly Leu Leu Gly Pro Lys Gly Glu Pro Gly Ile Pro Gly Asp Gln
    450                 455                 460

Gly Leu Gln Gly Pro Pro Gly Ile Pro Gly Ile Gly Gly Pro Ser Gly
465                 470                 475                 480

Pro Ile Gly Pro Pro Gly Ile Pro Gly Pro Lys Gly Glu Pro Gly Leu
                485                 490                 495

Pro Gly Pro Pro Gly Phe Pro Gly Ile Gly Lys Pro Gly Val Ala Gly
            500                 505                 510

Leu His Gly Pro Pro Gly Lys Pro Gly Ala Leu Gly Pro Gln Gly Gln
        515                 520                 525

Pro Gly Leu Pro Gly Pro Pro Gly Pro Pro Gly Pro Pro Gly Pro Pro
    530                 535                 540

Ala Val Met Pro Pro Thr Pro Pro Pro Gln Gly Glu Tyr Leu Pro Asp
545                 550                 555                 560

Met Gly Leu Gly Ile Asp Gly Val Lys Pro Pro His Ala Tyr Gly Ala
                565                 570                 575

Lys Lys Gly Lys Asn Gly Gly Pro Ala Tyr Glu Met Pro Ala Phe Thr
            580                 585                 590

Ala Glu Leu Thr Ala Pro Phe Pro Pro Val Gly Ala Pro Val Lys Phe
        595                 600                 605
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Asn Lys Leu Leu Tyr Asn Gly Arg Gln Asn Tyr Asn Pro Gln Thr Gly
610 615 620

Ile Phe Thr Cys Glu Val Pro Gly Val Tyr Tyr Phe Ala Tyr His Val
625 630 635 640

His Cys Lys Gly Gly Asn Val Trp Val Ala Leu Phe Lys Asn Asn Glu
645 650 655

Pro Val Met Tyr Thr Tyr Asp Glu Tyr Lys Lys Gly Phe Leu Asp Gln
660 665 670

Ala Ser Gly Ser Ala Val Leu Leu Leu Arg Pro Gly Asp Arg Val Phe
675 680 685

Leu Gln Met Pro Ser Glu Gln Ala Ala Gly Leu Tyr Ala Gly Gln Tyr
690 695 700

Val His Ser Ser Phe Ser Gly Tyr Leu Leu Tyr Pro Met
705 710 715

<210> 32

<211> 36

<212> PRT

<213> Homo sapiens

<400> 32

Pro Val Lys Phe Asn Lys Leu Leu Tyr Asn Gly Arg Gln Asn Tyr Asn
1 5 10 15

Pro Gln Thr Gly Ile Phe Thr Cys Glu Val Pro Gly Val Tyr Tyr Phe
20 25 30

Ala Tyr His Val
35

<210> 33

<211> 20

<212> PRT

<213> Homo sapiens

<400> 33

Phe Thr Cys Glu Val Pro Gly Val Tyr Tyr Phe Ala Tyr His Val His
1 5 10 15

Cys Lys Gly Gly
20

<210> 34

<211> 27

<212> PRT

<213> Homo sapiens

<400> 34

Phe Pro Pro Val Gly Ala Pro Val Lys Phe Asn Lys Leu Leu Tyr Asn
1 5 10 15

Gly Arg Gln Asn Tyr Asn Pro Gln Thr Gly Ile
20 25

<210> 35

<211> 22

<212> PRT

<213> Homo sapiens

<400> 35

Asp Gln Ala Ser Gly Ser Ala Val Leu Leu Leu Arg Pro Gly Asp Arg
1 5 10 15

Val Phe Leu Gln Met Pro
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<210> 36

<211> 20

<212> PRT

<213> Homo sapiens

<400> 36

Asp Gln Ala Ser Gly Ser Ala Val Leu Leu Leu Arg Pro Gly Asp Arg
1 5 10 15

Val Phe Leu Gln
20

<210> 37

<211> 27

<212> PRT

<213> Homo sapiens

<400> 37

Pro Gly Pro His Gly Leu Pro Gly Ile Gly Lys Pro Gly Gly Pro Gly
1 5 10 15

Leu Pro Gly Gln Pro Gly Pro Lys Gly Asp Arg
20 25

<210> 38

<211> 29

<212> PRT

<213> Homo sapiens

<400> 38

Gly Pro Pro Gly Ala Ile Gly Phe Pro Gly Pro Lys Gly Glu Gly Gly
1 5 10 15

Ile Val Gly Pro Gln Gly Pro Pro Gly Pro Lys Gly Glu

20 25

<210> 39

<211> 27

<212> PRT

<213> Homo sapiens

<400> 39

Gly Pro Pro Gly Ile Pro Gly Ile Gly Gly Pro Ser Gly Pro Ile Gly
1 5 10 15

Pro Pro Gly Ile Pro Gly Pro Lys Gly Glu Pro
20 25

<210> 40

<211> 27

<212> PRT

<213> Homo sapiens

<400> 40

Gly Pro Pro Gly Glu Pro Gly Leu Pro Gly Ile Pro Gly Pro Met Gly
1 5 10 15

Pro Pro Gly Ala Ile Gly Phe Pro Gly Pro Lys
20 25

<210> 41

<211> 27

<212> PRT

<213> Homo sapiens

<400> 41

Gly Val Pro Gly Leu Leu Gly Pro Lys Gly Glu Pro Gly Ile Pro Gly
1 5 10 15

Asp Gln Gly Leu Gln Gly Pro Pro Gly Ile Pro
20 25

<210> 42

<211> 27

<212> PRT

<213> Homo sapiens

<400> 42

Gly Lys Pro Gly Met Pro Gly Met Pro Gly Lys Pro Gly Ala Met Gly
1 5 10 15

Met Pro Gly Ala Lys Gly Glu Ile Gly Gln Lys
20 25

<210> 43

<211> 11

<212> PRT

<213> Homo sapiens

<400> 43

Val His Ser Ser Phe Ser Gly Tyr Leu Leu Tyr
1 5 10

<210> 44

<211> 27

<212> PRT

<213> Homo sapiens

<400> 44

Gly Gly Pro Gly Leu Pro Gly Gln Pro Gly Pro Lys Gly Asp Arg Gly
1 5 10 15

Pro Lys Gly Leu Pro Gly Pro Gln Gly Leu Arg
20 25

<210> 45

<211> 29

<212> PRT

<213> Homo sapiens

<400> 45

Gly Lys Pro Gly Met Pro Gly Met Pro Gly Lys Pro Gly Ala Met Gly
1 5 10 15

Met Pro Gly Ala Lys Gly Glu Ile Gly Gln Lys Gly Glu
20 25

<210> 46

<211> 27

<212> PRT

<213> Homo sapiens

<400> 46

Gly Ile Pro Gly Gln Pro Gly Phe Pro Gly Gly Lys Gly Glu Gln Gly
1 5 10 15

Leu Pro Gly Leu Pro Gly Pro Pro Gly Leu Pro
20 25

<210> 47

<211> 27

<212> PRT

<213> Homo sapiens

<400> 47

Gly Ala Pro Gly Ile Gly Gly Pro Pro Gly Glu Pro Gly Leu Pro Gly
1 5 10 15

Ile Pro Gly Pro Met Gly Pro Pro Gly Ala Ile
20 25

<210> 48

<211> 27

<212> PRT

<213> Homo sapiens

<400> 48

Gly Lys Pro Gly Gln Asp Gly Ile Pro Gly Gln Pro Gly Phe Pro Gly
1 5 10 15

Gly Lys Gly Glu Gln Gly Leu Pro Gly Leu Pro
20 25

<210> 49

<211> 29

<212> PRT

<213> Homo sapiens

<400> 49

Gly Phe Pro Gly Lys Pro Gly Phe Leu Gly Glu Val Gly Pro Pro Gly
1 5 10 15

Met Arg Gly Phe Pro Gly Pro Ile Gly Pro Lys Gly Glu
20 25

<210> 50

<211> 27

<212> PRT

<213> Homo sapiens

<400> 50

Gly Pro Pro Gly Ile Pro Gly Pro Lys Gly Glu Pro Gly Leu Pro Gly
1 5 10 15

Pro Pro Gly Phe Pro Gly Ile Gly Lys Pro Gly
20 25

<210> 51

<211> 27

<212> PRT

<213> Homo sapiens

<400> 51

Gly Met Pro Gly Ala Pro Gly Val Lys Gly Pro Pro Gly Met His Gly
1 5 10 15

Pro Pro Gly Pro Val Gly Leu Pro Gly Val Gly
20 25

<210> 52

<211> 27

<212> PRT

<213> Homo sapiens

<400> 52

Gly Phe Pro Gly Pro Gln Gly Pro Leu Gly Lys Pro Gly Ala Pro Gly
1 5 10 15

Glu Pro Gly Pro Gln Gly Pro Ile Gly Val Pro
20 25

<210> 53

<211> 27

<212> PRT

<213> Homo sapiens

<400> 53

Gly Pro Pro Gly Lys Pro Gly Ala Leu Gly Pro Gln Gly Gln Pro Gly
1 5 10 15

Leu Pro Gly Pro Pro Gly Pro Pro Gly Pro Pro
20 25

<210> 54

<211> 27

<212> PRT

<213> Homo sapiens

<400> 54

Gly Pro Ser Gly Pro Ile Gly Pro Pro Gly Ile Pro Gly Pro Lys Gly
1 5 10 15

Glu Pro Gly Leu Pro Gly Pro Pro Gly Phe Pro
20 25

<210> 55

<211> 27

<212> PRT

<213> Homo sapiens

<400> 55

Gly Leu Pro Gly Ile Pro Gly Pro Met Gly Pro Pro Gly Ala Ile Gly
1 5 10 15

Phe Pro Gly Pro Lys Gly Glu Gly Gly Ile Val
20 25

<210> 56

<211> 27

<212> PRT

<213> Homo sapiens

<400> 56

Gly Lys Pro Gly Ala Leu Gly Pro Gln Gly Gln Pro Gly Leu Pro Gly
1 5 10 15

Pro Pro Gly Pro Pro Gly Pro Pro Gly Pro Pro
20 25

<210> 57

<211> 29

<212> PRT

<213> Homo sapiens

<400> 57

Gly Pro Pro Gly Glu Pro Gly Leu Pro Gly Ile Pro Gly Pro Met Gly
1 5 10 15

Pro Pro Gly Ala Ile Gly Phe Pro Gly Pro Lys Gly Glu
20 25

<210> 58

<211> 29

<212> PRT

<213> Homo sapiens

<400> 58

Gly Pro Ile Gly Pro Lys Gly Glu His Gly Gln Lys Gly Val Pro Gly
1 5 10 15

Leu Pro Gly Val Pro Gly Leu Leu Gly Pro Lys Gly Glu
20 25

<210> 59

<211> 27

<212> PRT

<213> Homo sapiens

<400> 59

Pro Gly Ile Gly Lys Pro Gly Gly Pro Gly Leu Pro Gly Gln Pro Gly
1 5 10 15

Pro Lys Gly Asp Arg Gly Pro Lys Gly Leu Pro
20 25

<210> 60

<211> 27

<212> PRT

<213> Homo sapiens

<400> 60

Gly Ile Gly Gly Pro Ser Gly Pro Ile Gly Pro Pro Gly Ile Pro Gly
1 5 10 15

Pro Lys Gly Glu Pro Gly Leu Pro Gly Pro Pro
20 25

<210> 61

<211> 27

<212> PRT

<213> Homo sapiens

<400> 61

Gly Pro Pro Gly Met Arg Gly Phe Pro Gly Pro Ile Gly Pro Lys Gly
1 5 10 15

Glu His Gly Gln Lys Gly Val Pro Gly Leu Pro

20 25

<210> 62

<211> 10

<212> PRT

<213> Homo sapiens

<400> 62

Ser Ser Phe Ser Gly Tyr Leu Leu Tyr Pro
1 5 10

<210> 63

<211> 27

<212> PRT

<213> Homo sapiens

<400> 63

Gly Lys Pro Gly Gly Pro Gly Leu Pro Gly Gln Pro Gly Pro Lys Gly
1 5 10 15

Asp Arg Gly Pro Lys Gly Leu Pro Gly Pro Gln
20 25

<210> 64

<211> 29

<212> PRT

<213> Homo sapiens

<400> 64

Gly Glu Pro Gly Leu Pro Gly Ile Pro Gly Pro Met Gly Pro Pro Gly
1 5 10 15

Ala Ile Gly Phe Pro Gly Pro Lys Gly Glu Gly Gly Ile
20 25

<210> 65

<211> 29

<212> PRT

<213> Homo sapiens

<400> 65

Pro Gly Ile Gly Lys Pro Gly Phe Pro Gly Pro Lys Gly Asp Arg Gly
1 5 10 15

Met Gly Gly Val Pro Gly Ala Leu Gly Pro Arg Gly Glu
20 25

<210> 66

<211> 27

<212> PRT

<213> Homo sapiens

<400> 66

Gly Pro Gln Gly Pro Pro Gly Pro Lys Gly Glu Pro Gly Leu Gln Gly
1 5 10 15

Phe Pro Gly Lys Pro Gly Phe Leu Gly Glu Val
20 25

<210> 67

<211> 27

<212> PRT

<213> Homo sapiens

<400> 67

Pro Gly Pro Gln Gly Tyr Pro Gly Val Gly Lys Pro Gly Met Pro Gly
1 5 10 15

Met Pro Gly Lys Pro Gly Ala Met Gly Met Pro
20 25

<210> 68

<211> 27

<212> PRT

<213> Homo sapiens

<400> 68

Gly Ile Pro Gly Ile Gly Gly Pro Ser Gly Pro Ile Gly Pro Pro Gly
1 5 10 15

Ile Pro Gly Pro Lys Gly Glu Pro Gly Leu Pro
20 25

<210> 69

<211> 27

<212> PRT

<213> Homo sapiens

<400> 69

Gly Pro Arg Gly Glu Lys Gly Pro Ile Gly Ala Pro Gly Ile Gly Gly
1 5 10 15

Pro Pro Gly Glu Pro Gly Leu Pro Gly Ile Pro
20 25

<210> 70

<211> 29

<212> PRT

<213> Homo sapiens

<400> 70

Gly Lys Pro Gly Phe Leu Gly Glu Val Gly Pro Pro Gly Met Arg Gly
1 5 10 15

Phe Pro Gly Pro Ile Gly Pro Lys Gly Glu His Gly Gln
20 25

<210> 71

<211> 27

<212> PRT

<213> Homo sapiens

<400> 71

Gly Glu Pro Gly Pro Gln Gly Pro Ile Gly Val Pro Gly Val Gln Gly
1 5 10 15

Pro Pro Gly Ile Pro Gly Ile Gly Lys Pro Gly
20 25

<210> 72

<211> 27

<212> PRT

<213> Homo sapiens

<400> 72

Gly Ile Gly Gly Pro Pro Gly Glu Pro Gly Leu Pro Gly Ile Pro Gly
1 5 10 15

Pro Met Gly Pro Pro Gly Ala Ile Gly Phe Pro
20 25

<210> 73

<211> 27

<212> PRT

<213> Homo sapiens

<400> 73

Gly Lys Pro Gly Ala Pro Gly Glu Pro Gly Pro Gln Gly Pro Ile Gly
1 5 10 15

Val Pro Gly Val Gln Gly Pro Pro Gly Ile Pro
20 25

<210> 74

<211> 27

<212> PRT

<213> Homo sapiens

<400> 74

Gly Leu Pro Gly Gln Pro Gly Pro Lys Gly Asp Arg Gly Pro Lys Gly
1 5 10 15

Leu Pro Gly Pro Gln Gly Leu Arg Gly Pro Lys
20 25

<210> 75

<211> 27

<212> PRT

<213> Homo sapiens

<400> 75

Gly Val Pro Gly Leu Pro Gly Val Pro Gly Leu Leu Gly Pro Lys Gly
1 5 10 15

Glu Pro Gly Ile Pro Gly Asp Gln Gly Leu Gln
20 25

<210> 76

<211> 27

<212> PRT

<213> Homo sapiens

<400> 76

Gly Lys Pro Gly Phe Leu Gly Glu Val Gly Pro Pro Gly Met Arg Gly
1 5 10 15

Phe Pro Gly Pro Ile Gly Pro Lys Gly Glu His
20 25

<210> 77

<211> 27

<212> PRT

<213> Homo sapiens

<400> 77

Gly Phe Pro Gly Pro Ile Gly Pro Lys Gly Glu His Gly Gln Lys Gly
1 5 10 15

Val Pro Gly Leu Pro Gly Val Pro Gly Leu Leu
20 25

<210> 78

<211> 27

<212> PRT

<213> Homo sapiens

<400> 78

Gln Gly Pro Pro Gly Ile Pro Gly Ile Gly Lys Pro Gly Gln Asp Gly
1 5 10 15

Ile Pro Gly Gln Pro Gly Phe Pro Gly Gly Lys
20 25

<210> 79

<211> 27

<212> PRT

<213> Homo sapiens

<400> 79

Pro Gly Pro Pro Gly Phe Pro Gly Ile Gly Lys Pro Gly Val Ala Gly
1 5 10 15

Leu His Gly Pro Pro Gly Lys Pro Gly Ala Leu
20 25

<210> 80

<211> 27

<212> PRT

<213> Homo sapiens

<400> 80

Gly Gln Asp Gly Ile Pro Gly Gln Pro Gly Phe Pro Gly Gly Lys Gly
1 5 10 15

Glu Gln Gly Leu Pro Gly Leu Pro Gly Pro Pro
20 25

<210> 81

<211> 27

<212> PRT

<213> Homo sapiens

<400> 81

Gly Pro Ile Gly Ala Pro Gly Ile Gly Gly Pro Pro Gly Glu Pro Gly
1 5 10 15

Leu Pro Gly Ile Pro Gly Pro Met Gly Pro Pro
20 25

<210> 82

<211> 27

<212> PRT

<213> Homo sapiens

<400> 82

Gly Pro Met Gly Pro Pro Gly Ala Ile Gly Phe Pro Gly Pro Lys Gly
1 5 10 15

Glu Gly Gly Ile Val Gly Pro Gln Gly Pro Pro
20 25

<210> 83

<211> 29

<212> PRT

<213> Homo sapiens

<400> 83

Gly Pro Ile Gly Ala Pro Gly Ile Gly Gly Pro Pro Gly Glu Pro Gly
1 5 10 15

Leu Pro Gly Ile Pro Gly Pro Met Gly Pro Pro Gly Ala
20 25

<210> 84

<211> 27

<212> PRT

<213> Homo sapiens

<400> 84

Gly Pro Leu Gly Lys Pro Gly Ala Pro Gly Glu Pro Gly Pro Gln Gly
1 5 10 15

Pro Ile Gly Val Pro Gly Val Gln Gly Pro Pro

20 25

<210> 85

<211> 27

<212> PRT

<213> Homo sapiens

<400> 85

Pro Gly Val Gly Lys Pro Gly Met Pro Gly Met Pro Gly Lys Pro Gly
1 5 10 15

Ala Met Gly Met Pro Gly Ala Lys Gly Glu Ile
20 25

<210> 86

<211> 27

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<213> Homo sapiens

<400> 86

Gly Met Pro Gly Met Pro Gly Lys Pro Gly Ala Met Gly Met Pro Gly
1 5 10 15

Ala Lys Gly Glu Ile Gly Gln Lys Gly Glu Ile
20 25

<210> 87

<211> 27

<212> PRT

<213> Homo sapiens

<400> 87

Gly Glu Pro Gly Leu Gln Gly Phe Pro Gly Lys Pro Gly Phe Leu Gly
1 5 10 15

Glu Val Gly Pro Pro Gly Met Arg Gly Phe Pro
20 25

<210> 88

<211> 27

<212> PRT

<213> Homo sapiens

<400> 88

Gly Gln Pro Gly Leu Pro Gly Pro Pro Gly Pro Pro Gly Pro Pro Gly
1 5 10 15

Pro Pro Ala Val Met Pro Pro Thr Pro Pro Pro
20 25

<210> 89

<211> 27

<212> PRT

<213> Homo sapiens

<400> 89

Gly Leu Pro Gly Val Pro Gly Leu Leu Gly Pro Lys Gly Glu Pro Gly
1 5 10 15

Ile Pro Gly Asp Gln Gly Leu Gln Gly Pro Pro
20 25

<210> 90

<211> 27

<212> PRT

<213> Homo sapiens

<400> 90

Gly Leu Leu Gly Pro Lys Gly Glu Pro Gly Ile Pro Gly Asp Gln Gly
1 5 10 15

Leu Gln Gly Pro Pro Gly Ile Pro Gly Ile Gly
20 25

<210> 91

<211> 27

<212> PRT

<213> Homo sapiens

<400> 91

Gly Phe Pro Gly Gly Lys Gly Glu Gln Gly Leu Pro Gly Leu Pro Gly
1 5 10 15

Pro Pro Gly Leu Pro Gly Ile Gly Lys Pro Gly
20 25

<210> 92

<211> 27

<212> PRT

<213> Homo sapiens

<400> 92

Gly Phe Pro Gly Lys Pro Gly Phe Leu Gly Glu Val Gly Pro Pro Gly
1 5 10 15

Met Arg Gly Phe Pro Gly Pro Ile Gly Pro Lys
20 25

<210> 93

<211> 27

<212> PRT

<213> Homo sapiens

<400> 93

Gly Pro Gln Gly Gln Pro Gly Leu Pro Gly Pro Pro Gly Pro Pro Gly
1 5 10 15

Pro Pro Gly Pro Pro Ala Val Met Pro Pro Thr
20 25

<210> 94

<211> 29

<212> PRT

<213> Homo sapiens

<400> 94

Gly Ile Pro Gly Gln Pro Gly Phe Pro Gly Gly Lys Gly Glu Gln Gly
1 5 10 15

Leu Pro Gly Leu Pro Gly Pro Pro Gly Leu Pro Gly Ile
20 25

<210> 95

<211> 27

<212> PRT

<213> Homo sapiens

<400> 95

Pro Gly Ile Gly Lys Pro Gly Gln Asp Gly Ile Pro Gly Gln Pro Gly
1 5 10 15

Phe Pro Gly Gly Lys Gly Glu Gln Gly Leu Pro
20 25

<210> 96

<211> 27

<212> PRT

<213> Homo sapiens

<400> 96

Gly Leu His Gly Pro Pro Gly Lys Pro Gly Ala Leu Gly Pro Gln Gly
1 5 10 15

Gln Pro Gly Leu Pro Gly Pro Pro Gly Pro Pro
20 25

<210> 97

<211> 29

<212> PRT

<213> Homo sapiens

<400> 97

Gln Gly Tyr Pro Gly Val Gly Lys Pro Gly Met Pro Gly Met Pro Gly
1 5 10 15

Lys Pro Gly Ala Met Gly Met Pro Gly Ala Lys Gly Glu
20 25

<210> 98

<211> 27

<212> PRT

<213> Homo sapiens

<400> 98

Gly Gln Lys Gly Val Pro Gly Leu Pro Gly Val Pro Gly Leu Leu Gly
1 5 10 15

Pro Lys Gly Glu Pro Gly Ile Pro Gly Asp Gln
20 25

<210> 99

<211> 27

<212> PRT

<213> Homo sapiens

<400> 99

Gly Ile Pro Gly Pro Lys Gly Glu Pro Gly Leu Pro Gly Pro Pro Gly
1 5 10 15

Phe Pro Gly Ile Gly Lys Pro Gly Val Ala Gly
20 25

<210> 100

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<212> PRT

<213> Homo sapiens

<400> 100

Gly Met Pro Gly Met Pro Gly Lys Pro Gly Ala Met Gly Met Pro Gly
1 5 10 15

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20 25

<210> 101

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<212> PRT

<213> Homo sapiens

<400> 101

Gly Ala Leu Gly Pro Gln Gly Gln Pro Gly Leu Pro Gly Pro Pro Gly
1 5 10 15

Pro Pro Gly Pro Pro Gly Pro Pro Ala Val Met
20 25

<210> 102

<211> 27

<212> PRT

<213> Homo sapiens

<400> 102

Gly Val Ala Gly Leu His Gly Pro Pro Gly Lys Pro Gly Ala Leu Gly
1 5 10 15

Pro Gln Gly Gln Pro Gly Leu Pro Gly Pro Pro
20 25

<210> 103

<211> 27

<212> PRT

<213> Homo sapiens

<400> 103

Pro Gly Pro Pro Gly Leu Pro Gly Ile Gly Lys Pro Gly Phe Pro Gly
1 5 10 15

Pro Lys Gly Asp Arg Gly Met Gly Gly Val Pro
20 25

<210> 104

<211> 29

<212> PRT

<213> Homo sapiens

<400> 104

Gly Pro Pro Gly Lys Pro Gly Ala Leu Gly Pro Gln Gly Gln Pro Gly
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Leu Pro Gly Pro Pro Gly Pro Pro Gly Pro Pro Gly Pro
20 25

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<211> 27

<212> PRT

<213> Homo sapiens

<400> 105

Gly Gln Pro Gly Phe Pro Gly Gly Lys Gly Glu Gln Gly Leu Pro Gly
1 5 10 15

Leu Pro Gly Pro Pro Gly Leu Pro Gly Ile Gly
20 25

<210> 106

<211> 29

<212> PRT

<213> Homo sapiens

<400> 106

Gly Lys Pro Gly Phe Pro Gly Pro Lys Gly Asp Arg Gly Met Gly Gly
1 5 10 15

Val Pro Gly Ala Leu Gly Pro Arg Gly Glu Lys Gly Pro
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<210> 107

<211> 15

<212> PRT

<213> Homo sapiens

<400> 107

Gly Pro Pro Gly Pro Pro Ala Val Met Pro Pro Thr Pro Pro Pro

1 5 10 15

<210> 108

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<212> PRT

<213> Homo sapiens

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Pro Gly Val Gly Lys Pro Gly Met Pro Gly Met Pro Gly Lys Pro Gly
1 5 10 15

Ala Met Gly Met Pro Gly Ala Lys Gly Glu Ile Gly Gln
20 25

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Gly Pro Lys Gly Glu His Gly Gln Lys Gly Val Pro Gly Leu Pro Gly
1 5 10 15

Val Pro Gly Leu Leu Gly Pro Lys Gly Glu Pro
20 25

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<211> 27

<212> PRT

<213> Homo sapiens

<400> 110

Gly Pro Gln Gly Pro Leu Gly Lys Pro Gly Ala Pro Gly Glu Pro Gly
1 5 10 15

Pro Gln Gly Pro Ile Gly Val Pro Gly Val Gln
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<212> PRT

<213> Homo sapiens

<400> 111

Leu Gly Pro Gln Gly Gln Pro Gly Leu Pro Gly Pro Pro Gly Pro Pro
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Gly Pro Pro Gly Pro Pro Ala Val Met Pro Pro Thr Pro Pro Pro Gln
20 25 30

Gly

<210> 112

<211> 27

<212> PRT

<213> Homo sapiens

<400> 112

Gly Met Pro Gly Lys Pro Gly Ala Met Gly Met Pro Gly Ala Lys Gly
1 5 10 15

Glu Ile Gly Gln Lys Gly Glu Ile Gly Pro Met
20 25

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<211> 27

<212> PRT

<213> Homo sapiens

<400> 113

Gly Val Pro Gly Ala Leu Gly Pro Arg Gly Glu Lys Gly Pro Ile Gly
1 5 10 15

Ala Pro Gly Ile Gly Gly Pro Pro Gly Glu Pro
20 25

<210> 114

<211> 27

<212> PRT

<213> Homo sapiens

<400> 114

Gly Gln Pro Gly Pro Lys Gly Asp Arg Gly Pro Lys Gly Leu Pro Gly
1 5 10 15

Pro Gln Gly Leu Arg Gly Pro Lys Gly Asp Lys
20 25

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<211> 27

<212> PRT

<213> Homo sapiens

<400> 115

Gly Pro Ile Gly Pro Pro Gly Ile Pro Gly Pro Lys Gly Glu Pro Gly
1 5 10 15

Leu Pro Gly Pro Pro Gly Phe Pro Gly Ile Gly
20 25

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<211> 27

<212> PRT

<213> Homo sapiens

<400> 116

Gly Lys Pro Gly Val Ala Gly Leu His Gly Pro Pro Gly Lys Pro Gly
1 5 10 15

Ala Leu Gly Pro Gln Gly Gln Pro Gly Leu Pro
20 25

<210> 117

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<213> Homo sapiens

<400> 117

Gly Glu Pro Gly Leu Pro Gly Ile Pro Gly Pro Met Gly Pro Pro Gly
1 5 10 15

Ala Ile Gly Phe Pro Gly Pro Lys Gly Glu Gly
20 25

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<212> PRT

<213> Homo sapiens

<400> 118

Pro Gly Pro Val Gly Leu Pro Gly Val Gly Lys Pro Gly Val Thr Gly
1 5 10 15

Phe Pro Gly Pro Gln Gly Pro Leu Gly Lys Pro
20 25

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<213> Homo sapiens

<400> 119

Gly Ala Pro Gly Glu Pro Gly Pro Gln Gly Pro Ile Gly Val Pro Gly
1 5 10 15

Val Gln Gly Pro Pro Gly Ile Pro Gly Ile Gly
20 25

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<213> Homo sapiens

<400> 120

Pro Gly Val Gly Lys Pro Gly Val Thr Gly Phe Pro Gly Pro Gln Gly
1 5 10 15

Pro Leu Gly Lys Pro Gly Ala Pro Gly Glu Pro
20 25

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<211> 29

<212> PRT

<213> Homo sapiens

<400> 121

Gly Ile Pro Gly Asp Gln Gly Leu Gln Gly Pro Pro Gly Ile Pro Gly
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<400> 122

Gly Glu Gly Gly Ile Val Gly Pro Gln Gly Pro Pro Gly Pro Lys Gly
1 5 10 15

Glu Pro Gly Leu Gln Gly Phe Pro Gly Lys Pro
20 25

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<213> Homo sapiens

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Gly Leu Gln Gly Pro Pro Gly Ile Pro Gly Ile Gly Gly Pro Ser Gly
1 5 10 15

Pro Ile Gly Pro Pro Gly Ile Pro Gly Pro Lys Gly Glu
20 25

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<211> 24

<212> PRT

<213> Homo sapiens

<400> 124

Gly Gln Pro Gly Leu Pro Gly Pro Pro Gly Pro Pro Gly Pro Pro Gly
1 5 10 15

Pro Pro Ala Val Met Pro Pro Thr
20

<210> 125

<211> 27

<212> PRT

<213> Homo sapiens

<400> 125

Gly Pro Pro Gly Pro Lys Gly Glu Pro Gly Leu Gln Gly Phe Pro Gly
1 5 10 15

Lys Pro Gly Phe Leu Gly Glu Val Gly Pro Pro
20 25

<210> 126

<211> 27

<212> PRT

<213> Homo sapiens

<400> 126

Gly Ile Pro Gly Asp Gln Gly Leu Gln Gly Pro Pro Gly Ile Pro Gly
1 5 10 15

Ile Gly Gly Pro Ser Gly Pro Ile Gly Pro Pro
20 25

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<213> Homo sapiens

<400> 127

Gly Glu Pro Gly Leu Gln Gly Phe Pro Gly Lys Pro Gly Phe Leu Gly
1 5 10 15

Glu Val Gly Pro Pro Gly Met Arg Gly Phe Pro Gly Pro
20 25

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<211> 44

<212> PRT

<213> Homo sapiens

<400> 128

Pro Pro Gly Lys Pro Gly Ala Leu Gly Pro Gln Gly Gln Pro Gly Leu
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Pro Gly Pro Pro Gly Pro Pro Gly Pro Pro Gly Pro Pro Ala Val Met
20 25 30

Pro Pro Thr Pro Pro Pro Gln Gly Glu Tyr Leu Pro
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<212> PRT

<213> Homo sapiens

<400> 129

Met Pro Gly Ala Pro Gly Val Lys Gly Pro Pro Gly Met His Gly Pro
1 5 10 15

Pro Gly Pro Val Gly Leu Pro Gly Val Gly Lys Pro Gly Val Thr Gly
20 25 30

Phe Pro Gly Pro Gln Gly Pro Leu Gly Lys Pro Gly
35 40

<210> 130

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<211> 44

<212> PRT

<213> Homo sapiens

<400> 130

Pro Gln Gly Pro Leu Gly Lys Pro Gly Ala Pro Gly Glu Pro Gly Pro
1 5 10 15

Gln Gly Pro Ile Gly Val Pro Gly Val Gln Gly Pro Pro Gly Ile Pro
20 25 30

Gly Ile Gly Lys Pro Gly Gln Asp Gly Ile Pro Gly
35 40

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<211> 29

<212> PRT

<213> Homo sapiens

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Gly Pro Pro Gly Ile Pro Gly Ile Gly Gly Pro Ser Gly Pro Ile Gly
1 5 10 15

Pro Pro Gly Ile Pro Gly Pro Lys Gly Glu Pro Gly Leu
20 25

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<211> 18

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<213> Homo sapiens

<400> 132

Pro Gly Pro Pro Gly Pro Pro Gly Pro Pro Ala Val Met Pro Pro Thr
1 5 10 15

Pro Pro

<210> 133

<211> 27

<212> PRT

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<400> 133

Gly Glu Val Gly Pro Pro Gly Met Arg Gly Phe Pro Gly Pro Ile Gly
1 5 10 15

Pro Lys Gly Glu His Gly Gln Lys Gly Val Pro
20 25

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<211> 27

<212> PRT

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<400> 134

Gly Glu His Gly Gln Lys Gly Val Pro Gly Leu Pro Gly Val Pro Gly
1 5 10 15

Leu Leu Gly Pro Lys Gly Glu Pro Gly Ile Pro
20 25

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Gly Leu Pro Gly Pro Pro Gly Pro Pro Gly Pro Pro Gly Pro Pro
1 5 10 15

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Gly Leu Pro Gly Pro Pro Gly Pro Pro Gly Pro Pro Gly Pro Pro Ala
1 5 10 15

Val Met Pro Pro Thr Pro Pro Pro Gln Gly Glu
20 25

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Gly Pro Pro Gly Pro Pro Gly Pro Pro Gly Pro Pro Ala Val Met Pro
1 5 10 15

Pro Thr Pro Pro Pro Gln Gly Glu Tyr Leu Pro
20 25

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Gly Gly Pro Gly Leu Pro Gly Gln Pro Gly Pro Lys Gly Asp Arg Gly
1 5 10 15

Pro Lys Gly Leu Pro Gly Pro Gln Gly Leu Arg Gly Pro
20 25

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<212> PRT

<213> Homo sapiens

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Gly Met Pro Gly Ala Lys Gly Glu Ile Gly Gln Lys Gly Glu Ile Gly
1 5 10 15

Pro Met Gly Ile Pro Gly Pro Gln Gly Pro Pro
20 25

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<213> Homo sapiens

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Pro Gly Ile Gly Lys Pro Gly Gly Pro Gly Leu Pro Gly Gln Pro Gly
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Pro Lys Gly Asp Arg Gly Pro Lys Gly Leu Pro Gly Pro Gln Gly Leu
20 25 30

Arg Gly Pro
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Gly Lys Pro Gly Val Thr Gly Phe Pro Gly Pro Gln Gly Pro Leu Gly
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Lys Pro Gly Ala Pro Gly Glu Pro Gly Pro Gln
20 25

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<211> 29

<212> PRT

<213> Homo sapiens

<400> 142

Gly Pro Lys Gly Glu His Gly Gln Lys Gly Val Pro Gly Leu Pro Gly
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Val Pro Gly Leu Leu Gly Pro Lys Gly Glu Pro Gly Ile
20 25

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<211> 29

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<213> Homo sapiens

<400> 143

Gly Gln Pro Gly Phe Pro Gly Gly Lys Gly Glu Gln Gly Leu Pro Gly
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Leu Pro Gly Pro Pro Gly Leu Pro Gly Ile Gly Lys Pro
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Gly Ala Ile Gly Phe Pro Gly Pro Lys Gly Glu Gly Gly Ile Val Gly
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Pro Gln Gly Pro Pro Gly Pro Lys Gly Glu Pro
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Pro Lys Gly Glu Pro Gly Leu Pro Gly Pro Pro Gly Phe Pro Gly Ile
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Gly Lys Pro Gly Val Ala Gly Leu His Gly Pro Pro Gly Lys Pro Gly
20 25 30

Ala Leu Gly Pro Gln Gly Gln Pro Gly Leu Pro Gly
35 40

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Gly Ala Pro Gly Ile Gly Gly Pro Pro Gly Glu Pro Gly Leu Pro Gly
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Ile Pro Gly Pro Met Gly Pro Pro Gly Ala Ile Gly Phe
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Gly Leu Pro Gly Gln Pro Gly Pro Lys Gly Asp Arg Gly Pro Lys Gly
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Gly Met Gly Gly Val Pro Gly Ala Leu Gly Pro Arg Gly Glu Lys Gly
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Leu Pro Gly Pro Pro Gly Phe Pro Gly Ile Gly Lys Pro
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Pro Gly Pro Pro Gly Pro Pro Ala Val Met Pro Pro Thr Pro Pro
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Gly Lys Pro Gly Val Thr Gly Phe Pro Gly Pro Gln Gly Pro Leu Gly
1 5 10 15

Lys Pro Gly Ala Pro Gly Glu Pro Gly Pro Gln Gly Pro
20 25

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Gly Lys Pro Gly Ala Met Gly Met Pro Gly Ala Lys Gly Glu Ile Gly

1 5 10 15

Gln Lys Gly Glu Ile Gly Pro Met Gly Ile Pro
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Gly Phe Leu Gly Glu Val Gly Pro Pro Gly Met Arg Gly Phe Pro Gly
1 5 10 15

Pro Ile Gly Pro Lys Gly Glu His Gly Gln Lys Gly Val
20 25

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Ser Leu Arg Gly Glu Gln Gly Pro Arg Gly Glu Pro Gly Pro Arg Gly
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Pro Pro Gly Pro Pro Gly Leu Pro Gly His Gly
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<400> 155

Gly Pro Lys Gly Glu Pro Gly Leu Gln Gly Phe Pro Gly Lys Pro Gly
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Phe Leu Gly Glu Val Gly Pro Pro Gly Met Arg
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Gly Pro Leu Gln Leu Leu Gly Val Leu Leu Thr Ile Ser Leu Ser Ser
20 25 30

Ile Arg Leu Ile Gln Ala Gly Ala Tyr Tyr Gly Ile Lys Pro Leu Pro
35 40 45

Pro Gln Ile Pro Pro Gln Met Pro Pro Gln Ile Pro Gln Tyr Gln Pro
50 55 60

Leu Gly Gln Gln Val Pro His Met Pro Leu Ala Lys Asp Gly Leu Ala
65 70 75 80

Met Gly Lys Glu Met Pro His Leu Gln Tyr Gly Lys Glu Tyr Pro His
85 90 95

Leu Pro Gln Tyr Met Lys Glu Ile Gln Pro Ala Pro Arg Met Gly Lys
100 105 110

Glu Ala Val Pro Lys Lys Gly Lys Glu Ile Pro Leu Ala Ser Leu Arg
115 120 125

Gly Glu Gln Gly Pro Arg Gly Glu Pro Gly Pro Arg Gly Pro Pro Gly
130 135 140

Pro Pro Gly Leu Pro Gly His Gly Ile Pro Gly Ile Lys Gly Lys Pro
145 150 155 160

Gly Pro Gln Gly Tyr Pro Gly Val Gly Lys Pro Gly Met Pro Gly Met
165 170 175

Pro Gly Lys Pro Gly Ala Met Gly Met Pro Gly Ala Lys Gly Glu Ile
180 185 190

Gly Gln Lys Gly Glu Ile Gly Pro Met Gly Ile Pro Pro Gln Gly Pro
195 200 205

Pro Gly Pro His Gly Leu Pro Gly Ile Gly Lys Pro Gly Gly Pro Gly
210 215 220

Leu Pro Gly Gln Pro Gly Pro Lys Gly Asp Arg Gly Pro Lys Gly Leu
225 230 235 240

Pro Gly Pro Gln Gly Leu Arg Gly Pro Lys Gly Asp Lys Gly Phe Gly
245 250 255

Met Pro Gly Ala Pro Gly Val Lys Gly Pro Pro Gly Met His Gly Pro
260 265 270

Pro Gly Pro Val Gly Leu Pro Gly Val Gly Lys Pro Gly Val Thr Gly
275 280 285

Phe Pro Gly Pro Gln Gly Pro Leu Gly Lys Pro Gly Ala Pro Gly Glu
290 295 300

Pro Gly Pro Gln Gly Pro Ile Gly Val Pro Gly Val Gln Gly Pro Pro
305 310 315 320

Gly Ile Pro Gly Ile Gly Lys Pro Gly Gln Asp Gly Ile Pro Gly Gln
325 330 335

Pro Gly Phe Pro Gly Gly Lys Gly Glu Gln Gly Leu Pro Gly Leu Pro
340 345 350

Gly Pro Pro Gly Leu Pro Gly Ile Gly Lys Pro Gly Phe Pro Gly Pro
355 360 365

Lys Gly Asp Arg Gly Met Gly Gly Val Pro Gly Ala Leu Gly Pro Arg
370 375 380

Gly Glu Lys Gly Pro Ile Gly Ala Pro Gly Ile Gly Gly Pro Pro Gly
385 390 395 400

Glu Pro Gly Leu Pro Gly Ile Pro Gly Pro Met Gly Pro Pro Gly Ala
405 410 415

Ile Gly Phe Pro Gly Pro Lys Gly Glu Gly Gly Ile Val Gly Pro Gln
420 425 430

Gly Pro Pro Gly Pro Lys Gly Glu Pro Gly Leu Gln Gly Phe Pro Gly
435 440 445

Lys Pro Gly Phe Leu Gly Glu Val Gly Pro Pro Gly Met Arg Gly Phe
450 455 460

Pro Gly Pro Ile Gly Pro Lys Gly Glu His Gly Gln Lys Gly Val Pro
465 470 475 480

Gly Leu Pro Gly Val Pro Gly Leu Leu Gly Pro Lys Gly Glu Pro Gly
485 490 495

Ile Pro Gly Asp Gln Gly Leu Gln Gly Pro Pro Gly Ile Pro Gly Ile
500 505 510

Gly Gly Pro Ser Gly Pro Ile Gly Pro Pro Gly Ile Pro Gly Pro Lys
515 520 525

Gly Glu Pro Gly Leu Pro Gly Pro Pro Gly Phe Pro Gly Ile Gly Lys
530 535 540

Pro Gly Val Ala Gly Leu His Gly Pro Pro Gly Lys Pro Gly Ala Leu
545 550 555 560

Gly Pro Gln Gly Gln Pro Gly Leu Pro Gly Pro Pro Gly Pro Pro Gly
565 570 575

Pro Pro Gly Pro Pro Ala Val Met Pro Pro Thr Pro Pro Pro Gln Gly
580 585 590

Glu Tyr Leu Pro Asp Met Gly Leu Gly Ile Asp Gly Val Lys Pro Pro

595 600 605

His Ala Tyr Gly Ala Lys Lys Gly Lys Asn Gly Gly Pro Ala Tyr Glu
610 615 620

Met Pro Ala Phe Thr Ala Glu Leu Thr Ala Pro Phe Pro Pro Val Gly
625 630 635 640

Ala Pro Val Lys Phe Asn Lys Leu Leu Tyr Asn Gly Arg Gln Asn Tyr
645 650 655

Asn Pro Gln Thr Gly Ile Phe Thr Cys Glu Val Pro Gly Val Tyr Tyr
660 665 670

Phe Ala Tyr His Val His Cys Lys Gly Gly Asn Val Trp Val Ala Leu
675 680 685

Phe Lys Asn Asn Glu Pro Val Met Tyr Thr Tyr Asp Glu Tyr Lys Lys
690 695 700

Gly Phe Leu Asp Gln Ala Ser Gly Ser Ala Val Leu Leu Leu Arg Pro
705 710 715 720

Gly Asp Arg Val Phe Leu Gln Met Pro Ser Glu Gln Ala Ala Gly Leu
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gtttgcagat gtggaagcat cgtgctcaaa tccgcctttt ctgttggcat cacaaccagc 660

tacccagaag aaagactacc tattatattt aacaaggtcc tcttcaacga gggagagcac 720

tacaaccctg ccacagggaa gttcatctgt gctttcccag ggatctatta cttttcttat 780

gatatcacat tggctaataa gcatctggca atcggactgg tacacaatgg gcaataccgg 840

ataaagacct tcgacgccaa cacaggaaac catgatgtgg cttcggggtc cacagtcatc 900

tatctgcagc cagaagatga agtctggctg gagattttct tcacagacca gaatggcctc 960

ttctcagacc caggttgggc agacagctta ttctccgggt ttctcttata cgttgacaca 1020

gattacctag attccatatc agaagatgat gaattgtgat caggaccaag atccctgtgg 1080

taaacactct gattgaatct ggggttccag aaggtggaac aagcaggaat gggatccaaa 1140

gagactccca ctcagattct aaagcattta aagacaattc tagcagaatt tatcaaaaca 1200

agatgaaaca cagaaaagtt gaaaccacaa caaaatgaat tctattaaag aatagcccca 1260

gatataaatt ctcttgaaag caatgttcat aaatatttaa gcaaattaaa gacaatgtta 1320

acaaattttc tattaaatgc cctgagtgat aaaaccagtt ggcaataata ttgccttatt 1380

aaatcttcaa aaaataa 1397

<210> 159

<211> 1297

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (80)..(949)

<223>

<400> 159

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ctaagagcaa gagccaaag atg ttt gtc ttg ctc tat gtt aca agt ttt gcc 112
Met Phe Val Leu Leu Tyr Val Thr Ser Phe Ala
1 5 10

att tgt gcc agt gga caa ccc cgg ggt aat cag ttg aaa gga gag aac 160
Ile Cys Ala Ser Gly Gln Pro Arg Gly Asn Gln Leu Lys Gly Glu Asn
15 20 25

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tac tcc ccc agg tat atc tgc agc att cct ggc ttg cct gga cct cca      208
Tyr Ser Pro Arg Tyr Ile Cys Ser Ile Pro Gly Leu Pro Gly Pro Pro
        30                  35                  40

ggg ccc cct gga gca aat ggt tcc cct ggg ccc cat ggt cgc atc ggc      256
Gly Pro Pro Gly Ala Asn Gly Ser Pro Gly Pro His Gly Arg Ile Gly
    45                  50                  55

ctt cca gga aga gat ggt aga gac ggc agg aaa gga gag aaa ggt gaa      304
Leu Pro Gly Arg Asp Gly Arg Asp Gly Arg Lys Gly Glu Lys Gly Glu
60                  65                  70                  75

aag gga act gca ggt ttg aga ggt aag act gga ccg cta ggt ctt gcc      352
Lys Gly Thr Ala Gly Leu Arg Gly Lys Thr Gly Pro Leu Gly Leu Ala
                80                  85                  90

ggt gag aaa ggg gac caa gga gag act ggg aag aaa gga ccc ata gga      400
Gly Glu Lys Gly Asp Gln Gly Glu Thr Gly Lys Lys Gly Pro Ile Gly
            95                  100                 105

cca gag gga gag aaa gga gaa gta ggt cca att ggt cct cct gga cca      448
Pro Glu Gly Glu Lys Gly Glu Val Gly Pro Ile Gly Pro Pro Gly Pro
        110                 115                 120

aag gga gac aga gga gaa caa ggg gac ccg ggg ctg cct gga gtt tgc      496
Lys Gly Asp Arg Gly Glu Gln Gly Asp Pro Gly Leu Pro Gly Val Cys
    125                 130                 135

aga tgt gga agc atc gtg ctc aaa tcc gcc ttt tct gtt ggc atc aca      544
Arg Cys Gly Ser Ile Val Leu Lys Ser Ala Phe Ser Val Gly Ile Thr
140                 145                 150                 155

acc agc tac cca gaa gaa aga cta cct att ata ttt aac aag gtc ctc      592
Thr Ser Tyr Pro Glu Glu Arg Leu Pro Ile Ile Phe Asn Lys Val Leu
                160                 165                 170

ttc aac gag gga gag cac tac aac cct gcc aca ggg aag ttc atc tgt      640
Phe Asn Glu Gly Glu His Tyr Asn Pro Ala Thr Gly Lys Phe Ile Cys
            175                 180                 185

gct ttc cca ggg atc tat tac ttt tct tat gat atc aca ttg gct aat      688
Ala Phe Pro Gly Ile Tyr Tyr Phe Ser Tyr Asp Ile Thr Leu Ala Asn
        190                 195                 200

aag cat ctg gca atc gga ctg gta cac aat ggg caa tac cgg ata aag      736
Lys His Leu Ala Ile Gly Leu Val His Asn Gly Gln Tyr Arg Ile Lys
    205                 210                 215

acc ttc gac gcc aac aca gga aac cat gat gtg gct tcg ggg tcc aca      784
Thr Phe Asp Ala Asn Thr Gly Asn His Asp Val Ala Ser Gly Ser Thr
220                 225                 230                 235

gtc atc tat ctg cag cca gaa gat gaa gtc tgg ctg gag att ttc ttc      832
Val Ile Tyr Leu Gln Pro Glu Asp Glu Val Trp Leu Glu Ile Phe Phe
                240                 245                 250
```

Replacement Sheet

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aca gac cag aat ggc ctc ttc tca gac cca ggt tgg gca gac agc tta      880
Thr Asp Gln Asn Gly Leu Phe Ser Asp Pro Gly Trp Ala Asp Ser Leu
            255                 260                 265

ttc tcc ggg ttt ctc tta tac gtt gac aca gat tac cta gat tcc ata      928
Phe Ser Gly Phe Leu Leu Tyr Val Asp Thr Asp Tyr Leu Asp Ser Ile
        270                 275                 280

tca gaa gat gat gaa ttg tga tcaggaccaa gatccctgtg gtaaacactc         979
Ser Glu Asp Asp Glu Leu
    285

tgattgaatc tggggttcca gaaggtggaa caagcaggaa tgggatccaa agagactccc   1039

actcagattc taaagcattt aaagacaatt ctagcagaat ttatcaaaac aagatgaaac   1099

acagaaaagt tgaaaccaca acaaaatgaa ttctattaaa gaatagcccc agatataaat   1159

tctcttgaaa gcaatgttca taaatattta agcaaattaa agacaatgtt aacaaatttt   1219

ctattaaatg ccctgagtga taaaaccagt tggcaataat attgccttat taaatcttca   1279

aaaaataaaa aaaaaaaa                                                1297
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<210> 160

<211> 289

<212> PRT

<213> Homo sapiens

<400> 160

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Met Phe Val Leu Leu Tyr Val Thr Ser Phe Ala Ile Cys Ala Ser Gly
1               5                   10                  15

Gln Pro Arg Gly Asn Gln Leu Lys Gly Glu Asn Tyr Ser Pro Arg Tyr
            20                  25                  30

Ile Cys Ser Ile Pro Gly Leu Pro Gly Pro Pro Gly Pro Pro Gly Ala
        35                  40                  45

Asn Gly Ser Pro Gly Pro His Gly Arg Ile Gly Leu Pro Gly Arg Asp
    50                  55                  60

Gly Arg Asp Gly Arg Lys Gly Glu Lys Gly Glu Lys Gly Thr Ala Gly
65                  70                  75                  80
```

Leu Arg Gly Lys Thr Gly Pro Leu Gly Leu Ala Gly Glu Lys Gly Asp
85 90 95

Gln Gly Glu Thr Gly Lys Lys Gly Pro Ile Gly Pro Glu Gly Glu Lys
100 105 110

Gly Glu Val Gly Pro Ile Gly Pro Pro Gly Pro Lys Gly Asp Arg Gly
115 120 125

Glu Gln Gly Asp Pro Gly Leu Pro Gly Val Cys Arg Cys Gly Ser Ile
130 135 140

Val Leu Lys Ser Ala Phe Ser Val Gly Ile Thr Thr Ser Tyr Pro Glu
145 150 155 160

Glu Arg Leu Pro Ile Ile Phe Asn Lys Val Leu Phe Asn Glu Gly Glu
165 170 175

His Tyr Asn Pro Ala Thr Gly Lys Phe Ile Cys Ala Phe Pro Gly Ile
180 185 190

Tyr Tyr Phe Ser Tyr Asp Ile Thr Leu Ala Asn Lys His Leu Ala Ile
195 200 205

Gly Leu Val His Asn Gly Gln Tyr Arg Ile Lys Thr Phe Asp Ala Asn
210 215 220

Thr Gly Asn His Asp Val Ala Ser Gly Ser Thr Val Ile Tyr Leu Gln
225 230 235 240

Pro Glu Asp Glu Val Trp Leu Glu Ile Phe Phe Thr Asp Gln Asn Gly
245 250 255

Leu Phe Ser Asp Pro Gly Trp Ala Asp Ser Leu Phe Ser Gly Phe Leu
260 265 270

Leu Tyr Val Asp Thr Asp Tyr Leu Asp Ser Ile Ser Glu Asp Asp Glu
275 280 285

Leu

<210> 161

<211> 870

<212> DNA

<213> Homo sapiens

<400> 161
atgtttgtct tgctctatgt tacaagtttt gccatttgtg ccagtggaca accccggggt 60

aatcagttga aaggagagaa ctactccccc aggtatatct gcagcattcc tggcttgcct 120

ggacctccag ggcccccctgg agcaaatggt tcccctgggc cccatggtcg catcggcctt 180

ccaggaagag atggtagaga cggcaggaaa ggagagaaag gtgaaaaggg aactgcaggt 240

ttgagaggta agactggacc gctaggtctt gccggtgaga aaggggacca aggagagact 300

gggaagaaag gacccatagg accagaggga gagaaaggag aagtaggtcc aattggtcct 360

cctggaccaa agggagacag aggagaacaa ggggacccgg ggctgcctgg agtttgcaga 420

tgtggaagca tcgtgctcaa atccgccttt tctgttggca tcacaaccag ctacccagaa 480

gaaagactac ctattatatt taacaaggtc ctcttcaacg agggagagca ctacaaccct 540

gccacaggga agttcatctg tgctttccca gggatctatt acttttctta tgatatcaca 600

ttggctaata agcatctggc aatcggactg gtacacaatg ggcaataccg gataaagacc 660

ttcgacgcca acacaggaaa ccatgatgtg gcttcggggt ccacagtcat ctatctgcag 720

ccagaagatg aagtctggct ggagattttc ttcacagacc agaatggcct cttctcagac 780

ccaggttggg cagacagctt attctccggg tttctcttat acgttgacac agattaccta 840

gattccatat cagaagatga tgaattgtga 870

<210> 162

<211> 16

<212> PRT

<213> Homo sapiens

<400> 162

Met Phe Val Leu Leu Tyr Val Thr Ser Phe Ala Ile Cys Ala Ser Gly
1 5 10 15

<210> 163

<211> 273

<212> PRT

<213> Homo sapiens

<400> 163

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Gln Pro Arg Gly Asn Gln Leu Lys Gly Glu Asn Tyr Ser Pro Arg Tyr
1               5                  10                  15

Ile Cys Ser Ile Pro Gly Leu Pro Gly Pro Pro Gly Pro Pro Gly Ala
            20                  25                  30

Asn Gly Ser Pro Gly Pro His Gly Arg Ile Gly Leu Pro Gly Arg Asp
        35                  40                  45

Gly Arg Asp Gly Arg Lys Gly Glu Lys Gly Glu Lys Gly Thr Ala Gly
    50                  55                  60

Leu Arg Gly Lys Thr Gly Pro Leu Gly Leu Ala Gly Glu Lys Gly Asp
65                  70                  75                  80

Gln Gly Glu Thr Gly Lys Lys Gly Pro Ile Gly Pro Glu Gly Glu Lys
                85                  90                  95

Gly Glu Val Gly Pro Ile Gly Pro Pro Gly Pro Lys Gly Asp Arg Gly
            100                 105                 110

Glu Gln Gly Asp Pro Gly Leu Pro Gly Val Cys Arg Cys Gly Ser Ile
        115                 120                 125

Val Leu Lys Ser Ala Phe Ser Val Gly Ile Thr Thr Ser Tyr Pro Glu
    130                 135                 140

Glu Arg Leu Pro Ile Ile Phe Asn Lys Val Leu Phe Asn Glu Gly Glu
145                 150                 155                 160

His Tyr Asn Pro Ala Thr Gly Lys Phe Ile Cys Ala Phe Pro Gly Ile
                165                 170                 175

Tyr Tyr Phe Ser Tyr Asp Ile Thr Leu Ala Asn Lys His Leu Ala Ile
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180 185 190

Gly Leu Val His Asn Gly Gln Tyr Arg Ile Lys Thr Phe Asp Ala Asn
195 200 205

Thr Gly Asn His Asp Val Ala Ser Gly Ser Thr Val Ile Tyr Leu Gln
210 215 220

Pro Glu Asp Glu Val Trp Leu Glu Ile Phe Phe Thr Asp Gln Asn Gly
225 230 235 240

Leu Phe Ser Asp Pro Gly Trp Ala Asp Ser Leu Phe Ser Gly Phe Leu
245 250 255

Leu Tyr Val Asp Thr Asp Tyr Leu Asp Ser Ile Ser Glu Asp Asp Glu
260 265 270

Leu

<210> 164

<211> 36

<212> PRT

<213> Homo sapiens

<400> 164

Pro Ile Ile Phe Asn Lys Val Leu Phe Asn Glu Gly Glu His Tyr Asn
1 5 10 15

Pro Ala Thr Gly Lys Phe Ile Cys Ala Phe Pro Gly Ile Tyr Tyr Phe
20 25 30

Ser Tyr Asp Ile
35

<210> 165

<211> 27

<212> PRT

<213> Homo sapiens

<400> 165

Tyr Pro Glu Glu Arg Leu Pro Ile Ile Phe Asn Lys Val Leu Phe Asn
1 5 10 15

Glu Gly Glu His Tyr Asn Pro Ala Thr Gly Lys
20 25

<210> 166

<211> 20

<212> PRT

<213> Homo sapiens

<400> 166

Asp Val Ala Ser Gly Ser Thr Val Ile Tyr Leu Gln Pro Glu Asp Glu
1 5 10 15

Val Trp Leu Glu
20

<210> 167

<211> 22

<212> PRT

<213> Homo sapiens

<400> 167

Asp Val Ala Ser Gly Ser Thr Val Ile Tyr Leu Gln Pro Glu Asp Glu
1 5 10 15

Val Trp Leu Glu Ile Phe
20

<210> 168

<211> 20

<212> PRT

<213> Homo sapiens

<400> 168

Phe Ile Cys Ala Phe Pro Gly Ile Tyr Tyr Phe Ser Tyr Asp Ile Thr
1 5 10 15

Leu Ala Asn Lys
20

<210> 169

<211> 27

<212> PRT

<213> Homo sapiens

<400> 169

Gly Ser Pro Gly Pro His Gly Arg Ile Gly Leu Pro Gly Arg Asp Gly
1 5 10 15

Arg Asp Gly Arg Lys Gly Glu Lys Gly Glu Lys
20 25

<210> 170

<211> 27

<212> PRT

<213> Homo sapiens

<400> 170

Ser Ile Pro Gly Leu Pro Gly Pro Pro Gly Pro Pro Gly Ala Asn Gly
1 5 10 15

Ser Pro Gly Pro His Gly Arg Ile Gly Leu Pro
20 25

<210> 171

<211> 27

<212> PRT

<213> Homo sapiens

<400> 171

Gly Pro Pro Gly Pro Pro Gly Ala Asn Gly Ser Pro Gly Pro His Gly
1   5   10   15

Arg Ile Gly Leu Pro Gly Arg Asp Gly Arg Asp
            20   25

<210> 172

<211> 29

<212> PRT

<213> Homo sapiens

<400> 172

Gly Pro Pro Gly Ala Asn Gly Ser Pro Gly Pro His Gly Arg Ile Gly
1   5   10   15

Leu Pro Gly Arg Asp Gly Arg Asp Gly Arg Lys Gly Glu
            20   25

<210> 173

<211> 29

<212> PRT

<213> Homo sapiens

<400> 173

Gly Pro Leu Gly Leu Ala Gly Glu Lys Gly Asp Gln Gly Glu Thr Gly
1   5   10   15

Lys Lys Gly Pro Ile Gly Pro Glu Gly Glu Lys Gly Glu

20 25

<210> 174

<211> 27

<212> PRT

<213> Homo sapiens

<400> 174

Gly Leu Pro Gly Pro Pro Gly Pro Pro Gly Ala Asn Gly Ser Pro Gly
1 5 10 15

Pro His Gly Arg Ile Gly Leu Pro Gly Arg Asp
20 25

<210> 175

<211> 29

<212> PRT

<213> Homo sapiens

<400> 175

Gly Lys Lys Gly Pro Ile Gly Pro Glu Gly Glu Lys Gly Glu Val Gly
1 5 10 15

Pro Ile Gly Pro Pro Gly Pro Lys Gly Asp Arg Gly Glu
20 25

<210> 176

<211> 11

<212> PRT

<213> Homo sapiens

<400> 176

Ala Asp Ser Leu Phe Ser Gly Phe Leu Leu Tyr
1 5 10

<210> 177

<211> 27

<212> PRT

<213> Homo sapiens

<400> 177

Gly Pro Pro Gly Ala Asn Gly Ser Pro Gly Pro His Gly Arg Ile Gly
1 5 10 15

Leu Pro Gly Arg Asp Gly Arg Asp Gly Arg Lys
20 25

<210> 178

<211> 29

<212> PRT

<213> Homo sapiens

<400> 178

Gly Ala Asn Gly Ser Pro Gly Pro His Gly Arg Ile Gly Leu Pro Gly
1 5 10 15

Arg Asp Gly Arg Asp Gly Arg Lys Gly Glu Lys Gly Glu
20 25

<210> 179

<211> 27

<212> PRT

<213> Homo sapiens

<400> 179

Gly Leu Pro Gly Arg Asp Gly Arg Asp Gly Arg Lys Gly Glu Lys Gly
1 5 10 15

Glu Lys Gly Thr Ala Gly Leu Arg Gly Lys Thr
20 25

<210> 180

<211> 27

<212> PRT

<213> Homo sapiens

<400> 180

Gly Glu Lys Gly Glu Val Gly Pro Ile Gly Pro Pro Gly Pro Lys Gly
1 5 10 15

Asp Arg Gly Glu Gln Gly Asp Pro Gly Leu Pro
20 25

<210> 181

<211> 29

<212> PRT

<213> Homo sapiens

<400> 181

Gly Ser Pro Gly Pro His Gly Arg Ile Gly Leu Pro Gly Arg Asp Gly
1 5 10 15

Arg Asp Gly Arg Lys Gly Glu Lys Gly Glu Lys Gly Thr
20 25

<210> 182

<211> 305

<212> PRT

<213> Homo sapiens

<400> 182

Ser Ser Lys Thr Pro Ala Val Gly Arg Ser Cys Glu Gln Glu Pro Lys
1 5 10 15

Met Phe Val Leu Leu Tyr Val Thr Ser Phe Ala Ile Cys Ala Ser Gly
20 25 30

Gln Pro Arg Gly Asn Gln Leu Lys Gly Glu Asn Tyr Ser Pro Arg Tyr
35 40 45

Ile Cys Ser Ile Pro Gly Leu Pro Gly Pro Pro Gly Pro Pro Gly Ala
50 55 60

Asn Gly Ser Pro Gly Pro His Gly Arg Ile Gly Leu Pro Gly Arg Asp
65 70 75 80

Gly Arg Asp Gly Arg Lys Gly Glu Lys Gly Glu Lys Gly Thr Ala Gly
85 90 95

Leu Arg Gly Lys Thr Gly Pro Leu Gly Leu Ala Gly Glu Lys Gly Asp
100 105 110

Gln Gly Glu Thr Gly Lys Lys Gly Pro Ile Gly Pro Glu Gly Glu Lys
115 120 125

Gly Glu Val Gly Pro Ile Gly Pro Pro Gly Pro Lys Gly Asp Arg Gly
130 135 140

Glu Gln Gly Asp Pro Gly Leu Pro Gly Val Cys Arg Cys Gly Ser Ile
145 150 155 160

Val Leu Lys Ser Ala Phe Ser Val Gly Ile Thr Thr Ser Tyr Pro Glu
165 170 175

Glu Arg Leu Pro Ile Ile Phe Asn Lys Val Leu Phe Asn Glu Gly Glu
180 185 190

His Tyr Asn Pro Ala Thr Gly Lys Phe Ile Cys Ala Phe Pro Gly Ile
195 200 205

Tyr Tyr Phe Ser Tyr Asp Ile Thr Leu Ala Asn Lys His Leu Ala Ile
210 215 220

Gly Leu Val His Asn Gly Gln Tyr Arg Ile Lys Thr Phe Asp Ala Asn

225 230 235 240

Thr Gly Asn His Asp Val Ala Ser Gly Ser Thr Val Ile Tyr Leu Gln
245 250 255

Pro Glu Asp Glu Val Trp Leu Glu Ile Phe Phe Thr Asp Gln Asn Gly
260 265 270

Leu Phe Ser Asp Pro Gly Trp Ala Asp Ser Leu Phe Ser Gly Phe Leu
275 280 285

Leu Tyr Val Asp Thr Asp Tyr Leu Asp Ser Ile Ser Glu Asp Asp Glu
290 295 300

Leu
305

<210> 183

<211> 414

<212> DNA

<213> Homo sapiens

<400> 183
aggaaggctg attttattta gccgtttctt ttttcttggt ttgcacagta tctgggtcca 60

gcctgcagcc ctagggtcca gttcagagtc tgtcatctga accatgagga tctggtggtt 120

tctgcttgcc attgaaatct gcacagggaa cataaactca caggacacct gcaggcaagg 180

gcaccctggc atccctggga accccggtca caatggtctg cctggaagag atggacgaga 240

cggagcgaag ggtgacaaag gcgatgcagg agaaccagga cgtcctggca gcccggggaa 300

ggatgggacg agtggagaga agggagaacg aggagcagat ggaaaagttg aagcaaaagg 360

catcaaaggt gatcaaggct caagaggatc ccagaaaaca tggccccaag gggc 414

<210> 184

<211> 792

<212> DNA

<213> Homo sapiens

<400> 184
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gcctgcagcc ctagggtcca gttcagagtc tgtcatctga accatgagga tctggtggtt 120

tctgcttgcc attgaaatct gcacagggaa cataaactca caggacacct gcaggcaagg 180

gcaccctggc atccctggga accccggtca caatggtctg cctggaagag atggacgaga 240

cggagcgaag ggtgacaaag gcgatgcagg agaaccagga cgtcctggca gcccggggaa 300

ggatgggacg agtggagaga agggagaacg aggagcagat ggaaaagttg aagcaaaagg 360

catcaaaggt gatcaaggct caatgaggat ccccaggaaa acatggcccc aaggggcttg 420

cagggcccat gggagagaaa ggcctccgag gagagactgg gcctcagggg cagaagggga 480

ataagggtga cgtgggtccc actggtcctg aggggccaag gggcaacatt gggcctttgg 540

gcccaactgg tttaccgggc cccatgggcc ctattggaaa gcctggtccc aagggagaag 600

ctggacccac ggggccccag ggtgagccag gagtccgggg aataagaggc tggaaaggag 660

atcgaggaga gaaagggaaa atcggtgaga ctctagtctt gccaaaaagt gctttcactg 720

tggggctcac ggtgctgagc aagtttcctt cttcagatgt gcccattaaa tttgataaga 780

tccacatcac tg 792

<210> 185

<211> 951

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (18)..(884)

<223>

<400> 185
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Met Arg Ile Trp Trp Leu Leu Leu Ala Ile Glu
1 5 10

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atc tgc aca ggg aac ata aac tca cag gac acc tgc agg caa ggg cac      98
Ile Cys Thr Gly Asn Ile Asn Ser Gln Asp Thr Cys Arg Gln Gly His
            15                  20                  25

cct ggc atc cct ggg aac ccc ggt cac aat ggt ctg cct gga aga gat     146
Pro Gly Ile Pro Gly Asn Pro Gly His Asn Gly Leu Pro Gly Arg Asp
        30                  35                  40

gga cga gac gga gcg aag ggt gac aaa ggc gat gca gga gaa cca gga     194
Gly Arg Asp Gly Ala Lys Gly Asp Lys Gly Asp Ala Gly Glu Pro Gly
    45                  50                  55

cgt cct ggc agc ccg ggg aag gat ggg acg agt gga gag aag gga gaa     242
Arg Pro Gly Ser Pro Gly Lys Asp Gly Thr Ser Gly Glu Lys Gly Glu
60                  65                  70                  75

cga gga gca gat gga aaa gtt gaa gca aaa ggc atc aaa ggt gat caa     290
Arg Gly Ala Asp Gly Lys Val Glu Ala Lys Gly Ile Lys Gly Asp Gln
                80                  85                  90

ggc tca aga gga tcc cca gga aaa cat ggc ccc aag ggg ctt gca ggg     338
Gly Ser Arg Gly Ser Pro Gly Lys His Gly Pro Lys Gly Leu Ala Gly
            95                  100                 105

ccc atg gga gag aag ggc ctc cga gga gag act ggg cct cag ggg cag     386
Pro Met Gly Glu Lys Gly Leu Arg Gly Glu Thr Gly Pro Gln Gly Gln
        110                 115                 120

aag ggg aat aag ggt gac gtg ggt ccc act ggt cct gag ggg cca agg     434
Lys Gly Asn Lys Gly Asp Val Gly Pro Thr Gly Pro Glu Gly Pro Arg
    125                 130                 135

ggc aac att ggg cct ttg ggc cca act ggt tta ccg ggc ccc atg ggc     482
Gly Asn Ile Gly Pro Leu Gly Pro Thr Gly Leu Pro Gly Pro Met Gly
140                 145                 150                 155

cct att gga aag cct ggt ccc aaa gga gaa gct gga ccc acg ggg ccc     530
Pro Ile Gly Lys Pro Gly Pro Lys Gly Glu Ala Gly Pro Thr Gly Pro
                160                 165                 170

cag gat atg ccc att aaa ttt gat aag atc ctg tat aac gaa ttc aac     578
Gln Asp Met Pro Ile Lys Phe Asp Lys Ile Leu Tyr Asn Glu Phe Asn
            175                 180                 185

cat tat gat aca gca gcg ggg aaa ttc acg tgc cac att gct ggg gtc     626
His Tyr Asp Thr Ala Ala Gly Lys Phe Thr Cys His Ile Ala Gly Val
        190                 195                 200

tat tac ttc acc tac cac atc act gtt ttc tcc agg aat gtt cag gtg     674
Tyr Tyr Phe Thr Tyr His Ile Thr Val Phe Ser Arg Asn Val Gln Val
    205                 210                 215

tct ttg gtc aaa aat gga gta aaa ata ctg cac acc aaa gat gct tac     722
Ser Leu Val Lys Asn Gly Val Lys Ile Leu His Thr Lys Asp Ala Tyr
220                 225                 230                 235

atg agc tct gag gac cag gcc tct ggc ggc att gtc ctg cag ctg aag     770
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Met Ser Ser Glu Asp Gln Ala Ser Gly Gly Ile Val Leu Gln Leu Lys
240 245 250

ctc ggg gat gag gtg tgg ctg cag gtg aca gga gga gag agg ttc aat 818
Leu Gly Asp Glu Val Trp Leu Gln Val Thr Gly Gly Glu Arg Phe Asn
255 260 265

ggc ttg ttt gct gat gag gac gat gac aca act ttc aca ggg ttc ctt 866
Gly Leu Phe Ala Asp Glu Asp Asp Asp Thr Thr Phe Thr Gly Phe Leu
270 275 280

ctg ttc agc agc ccg tga cagaggagag tttaaaaatc cgccacacca 914
Leu Phe Ser Ser Pro
285

tccatcagaa tcagcttggg atgaacttat tcagatg 951

<210> 186

<211> 288

<212> PRT

<213> Homo sapiens

<400> 186

Met Arg Ile Trp Trp Leu Leu Leu Ala Ile Glu Ile Cys Thr Gly Asn
1 5 10 15

Ile Asn Ser Gln Asp Thr Cys Arg Gln Gly His Pro Gly Ile Pro Gly
20 25 30

Asn Pro Gly His Asn Gly Leu Pro Gly Arg Asp Gly Arg Asp Gly Ala
35 40 45

Lys Gly Asp Lys Gly Asp Ala Gly Glu Pro Gly Arg Pro Gly Ser Pro
50 55 60

Gly Lys Asp Gly Thr Ser Gly Glu Lys Gly Glu Arg Gly Ala Asp Gly
65 70 75 80

Lys Val Glu Ala Lys Gly Ile Lys Gly Asp Gln Gly Ser Arg Gly Ser
85 90 95

Pro Gly Lys His Gly Pro Lys Gly Leu Ala Gly Pro Met Gly Glu Lys
100 105 110

Gly Leu Arg Gly Glu Thr Gly Pro Gln Gly Gln Lys Gly Asn Lys Gly
115 120 125

Asp Val Gly Pro Thr Gly Pro Glu Gly Pro Arg Gly Asn Ile Gly Pro
130 135 140

Leu Gly Pro Thr Gly Leu Pro Gly Pro Met Gly Pro Ile Gly Lys Pro
145 150 155 160

Gly Pro Lys Gly Glu Ala Gly Pro Thr Gly Pro Gln Asp Met Pro Ile
165 170 175

Lys Phe Asp Lys Ile Leu Tyr Asn Glu Phe Asn His Tyr Asp Thr Ala
180 185 190

Ala Gly Lys Phe Thr Cys His Ile Ala Gly Val Tyr Tyr Phe Thr Tyr
195 200 205

His Ile Thr Val Phe Ser Arg Asn Val Gln Val Ser Leu Val Lys Asn
210 215 220

Gly Val Lys Ile Leu His Thr Lys Asp Ala Tyr Met Ser Ser Glu Asp
225 230 235 240

Gln Ala Ser Gly Gly Ile Val Leu Gln Leu Lys Leu Gly Asp Glu Val
245 250 255

Trp Leu Gln Val Thr Gly Gly Glu Arg Phe Asn Gly Leu Phe Ala Asp
260 265 270

Glu Asp Asp Asp Thr Thr Phe Thr Gly Phe Leu Leu Phe Ser Ser Pro
275 280 285

<210> 187

<211> 867

<212> DNA

<213> Homo sapiens

<400> 187
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ggaagagatg gacgagacgg agcgaagggt gacaaaggcg atgcaggaga accaggacgt 180

cctggcagcc cggggaagga tgggacgagt ggagagaagg gagaacgagg agcagatgga 240

aaagttgaag caaaaggcat caaaggtgat caaggctcaa gaggatcccc aggaaaacat 300

ggccccaagg ggcttgcagg gcccatggga gagaagggcc tccgaggaga gactgggcct 360

caggggcaga aggggaataa gggtgacgtg ggtcccactg gtcctgaggg gccaaggggc 420

aacattgggc ctttgggccc aactggttta ccgggcccca tgggccctat tggaaagcct 480

ggtcccaaag gagaagctgg acccacgggg ccccaggata tgcccattaa atttgataag 540

atcctgtata acgaattcaa ccattatgat acagcagcgg ggaaattcac gtgccacatt 600

gctggggtct attacttcac ctaccacatc actgttttct ccaggaatgt tcaggtgtct 660

ttggtcaaaa atggagtaaa aatactgcac accaaagatg cttacatgag ctctgaggac 720

caggcctctg gcggcattgt cctgcagctg aagctcgggg atgaggtgtg gctgcaggtg 780

acaggaggag agaggttcaa tggcttgttt gctgatgagg acgatgacac aactttcaca 840

gggttccttc tgttcagcag cccgtga 867

<210> 188

<211> 19

<212> PRT

<213> Homo sapiens

<400> 188

Met Arg Ile Trp Trp Leu Leu Leu Ala Ile Glu Ile Cys Thr Gly Asn
1 5 10 15

Ile Asn Ser

<210> 189

<211> 269

<212> PRT

<213> Homo sapiens

<400> 189

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Gln Asp Thr Cys Arg Gln Gly His Pro Gly Ile Pro Gly Asn Pro Gly
1               5                  10                  15

His Asn Gly Leu Pro Gly Arg Asp Gly Arg Asp Gly Ala Lys Gly Asp
            20                  25                  30

Lys Gly Asp Ala Gly Glu Pro Gly Arg Pro Gly Ser Pro Gly Lys Asp
        35                  40                  45

Gly Thr Ser Gly Glu Lys Gly Glu Arg Gly Ala Asp Gly Lys Val Glu
    50                  55                  60

Ala Lys Gly Ile Lys Gly Asp Gln Gly Ser Arg Gly Ser Pro Gly Lys
65                  70                  75                  80

His Gly Pro Lys Gly Leu Ala Gly Pro Met Gly Glu Lys Gly Leu Arg
                85                  90                  95

Gly Glu Thr Gly Pro Gln Gly Gln Lys Gly Asn Lys Gly Asp Val Gly
            100                 105                 110

Pro Thr Gly Pro Glu Gly Pro Arg Gly Asn Ile Gly Pro Leu Gly Pro
        115                 120                 125

Thr Gly Leu Pro Gly Pro Met Gly Pro Ile Gly Lys Pro Gly Pro Lys
    130                 135                 140

Gly Glu Ala Gly Pro Thr Gly Pro Gln Asp Met Pro Ile Lys Phe Asp
145                 150                 155                 160

Lys Ile Leu Tyr Asn Glu Phe Asn His Tyr Asp Thr Ala Ala Gly Lys
                165                 170                 175

Phe Thr Cys His Ile Ala Gly Val Tyr Tyr Phe Thr Tyr His Ile Thr
            180                 185                 190

Val Phe Ser Arg Asn Val Gln Val Ser Leu Val Lys Asn Gly Val Lys
        195                 200                 205
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Ile Leu His Thr Lys Asp Ala Tyr Met Ser Ser Glu Asp Gln Ala Ser
210 215 220

Gly Gly Ile Val Leu Gln Leu Lys Leu Gly Asp Glu Val Trp Leu Gln
225 230 235 240

Val Thr Gly Gly Glu Arg Phe Asn Gly Leu Phe Ala Asp Glu Asp Asp
245 250 255

Asp Thr Thr Phe Thr Gly Phe Leu Leu Phe Ser Ser Pro
260 265

<210> 190

<211> 36

<212> PRT

<213> Homo sapiens

<400> 190

Pro Ile Lys Phe Asp Lys Ile Leu Tyr Asn Glu Phe Asn His Tyr Asp
1 5 10 15

Thr Ala Ala Gly Lys Phe Thr Cys His Ile Ala Gly Val Tyr Tyr Phe
20 25 30

Thr Tyr His Ile
35

<210> 191

<211> 22

<212> PRT

<213> Homo sapiens

<400> 191

Asp Gln Ala Ser Gly Gly Ile Val Leu Gln Leu Lys Leu Gly Asp Glu
1 5 10 15

Val Trp Leu Gln Val Thr

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<210> 192

<211> 20

<212> PRT

<213> Homo sapiens

<400> 192

Asp Gln Ala Ser Gly Gly Ile Val Leu Gln Leu Lys Leu Gly Asp Glu
1 5 10 15

Val Trp Leu Gln
20

<210> 193

<211> 20

<212> PRT

<213> Homo sapiens

<400> 193

Phe Thr Cys His Ile Ala Gly Val Tyr Tyr Phe Thr Tyr His Ile Thr
1 5 10 15

Val Phe Ser Arg
20

<210> 194

<211> 27

<212> PRT

<213> Homo sapiens

<400> 194

Thr Gly Pro Gln Asp Met Pro Ile Lys Phe Asp Lys Ile Leu Tyr Asn
1 5 10 15

Glu Phe Asn His Tyr Asp Thr Ala Ala Gly Lys
20 25

<210> 195

<211> 27

<212> PRT

<213> Homo sapiens

<400> 195

Gly Ile Pro Gly Asn Pro Gly His Asn Gly Leu Pro Gly Arg Asp Gly
1 5 10 15

Arg Asp Gly Ala Lys Gly Asp Lys Gly Asp Ala
20 25

<210> 196

<211> 27

<212> PRT

<213> Homo sapiens

<400> 196

Gly Leu Pro Gly Pro Met Gly Pro Ile Gly Lys Pro Gly Pro Lys Gly
1 5 10 15

Glu Ala Gly Pro Thr Gly Pro Gln Asp Met Pro
20 25

<210> 197

<211> 29

<212> PRT

<213> Homo sapiens

<400> 197

Gly Arg Asp Gly Ala Lys Gly Asp Lys Gly Asp Ala Gly Glu Pro Gly
1 5 10 15

Arg Pro Gly Ser Pro Gly Lys Asp Gly Thr Ser Gly Glu
20 25

<210> 198

<211> 29

<212> PRT

<213> Homo sapiens

<400> 198

Gly Ile Pro Gly Asn Pro Gly His Asn Gly Leu Pro Gly Arg Asp Gly
1 5 10 15

Arg Asp Gly Ala Lys Gly Asp Lys Gly Asp Ala Gly Glu
20 25

<210> 199

<211> 29

<212> PRT

<213> Homo sapiens

<400> 199

Gly Asp Gln Gly Ser Arg Gly Ser Pro Gly Lys His Gly Pro Lys Gly
1 5 10 15

Leu Ala Gly Pro Met Gly Glu Lys Gly Leu Arg Gly Glu
20 25

<210> 200

<211> 27

<212> PRT

<213> Homo sapiens

<400> 200

Gly His Pro Gly Ile Pro Gly Asn Pro Gly His Asn Gly Leu Pro Gly
1 5 10 15

Arg Asp Gly Arg Asp Gly Ala Lys Gly Asp Lys
20 25

<210> 201

<211> 27

<212> PRT

<213> Homo sapiens

<400> 201

Gly Leu Pro Gly Arg Asp Gly Arg Asp Gly Ala Lys Gly Asp Lys Gly
1 5 10 15

Asp Ala Gly Glu Pro Gly Arg Pro Gly Ser Pro
20 25

<210> 202

<211> 27

<212> PRT

<213> Homo sapiens

<400> 202

Gly Asn Pro Gly His Asn Gly Leu Pro Gly Arg Asp Gly Arg Asp Gly
1 5 10 15

Ala Lys Gly Asp Lys Gly Asp Ala Gly Glu Pro
20 25

<210> 203

<211> 29

<212> PRT

<213> Homo sapiens

<400> 203

Gly His Pro Gly Ile Pro Gly Asn Pro Gly His Asn Gly Leu Pro Gly
1 5 10 15

Arg Asp Gly Arg Asp Gly Ala Lys Gly Asp Lys Gly Asp
20 25

<210> 204

<211> 27

<212> PRT

<213> Homo sapiens

<400> 204

Gly Asp Lys Gly Asp Ala Gly Glu Pro Gly Arg Pro Gly Ser Pro Gly
1 5 10 15

Lys Asp Gly Thr Ser Gly Glu Lys Gly Glu Arg
20 25

<210> 205

<211> 29

<212> PRT

<213> Homo sapiens

<400> 205

Gly Ala Lys Gly Asp Lys Gly Asp Ala Gly Glu Pro Gly Arg Pro Gly
1 5 10 15

Ser Pro Gly Lys Asp Gly Thr Ser Gly Glu Lys Gly Glu
20 25

<210> 206

<211> 29

<212> PRT

<213> Homo sapiens

<400> 206

Gly Asp Lys Gly Asp Ala Gly Glu Pro Gly Arg Pro Gly Ser Pro Gly
1 5 10 15

Lys Asp Gly Thr Ser Gly Glu Lys Gly Glu Arg Gly Ala
20 25

<210> 207

<211> 29

<212> PRT

<213> Homo sapiens

<400> 207

Gly Pro Glu Gly Pro Arg Gly Asn Ile Gly Pro Leu Gly Pro Thr Gly
1 5 10 15

Leu Pro Gly Pro Met Gly Pro Ile Gly Lys Pro Gly Pro
20 25

<210> 208

<211> 11

<212> PRT

<213> Homo sapiens

<400> 208

Asp Asp Thr Thr Phe Thr Gly Phe Leu Leu Phe
1 5 10

<210> 209

<211> 10

<212> PRT

<213> Homo sapiens

<400> 209

Thr Thr Phe Thr Gly Phe Leu Leu Phe Ser
1 5 10

<210> 210

<211> 27

<212> PRT

<213> Homo sapiens

<400> 210

Gly Ala Lys Gly Asp Lys Gly Asp Ala Gly Glu Pro Gly Arg Pro Gly
1 5 10 15

Ser Pro Gly Lys Asp Gly Thr Ser Gly Glu Lys
20 25

<210> 211

<211> 27

<212> PRT

<213> Homo sapiens

<400> 211

Gly Ser Pro Gly Lys Asp Gly Thr Ser Gly Glu Lys Gly Glu Arg Gly
1 5 10 15

Ala Asp Gly Lys Val Glu Ala Lys Gly Ile Lys
20 25

<210> 212

<211> 27

<212> PRT

<213> Homo sapiens

<400> 212

Cys Arg Gln Gly His Pro Gly Ile Pro Gly Asn Pro Gly His Asn Gly
1 5 10 15

Leu Pro Gly Arg Asp Gly Arg Asp Gly Ala Lys
20 25

<210> 213

<211> 29

<212> PRT

<213> Homo sapiens

<400> 213

Gly Pro Arg Gly Asn Ile Gly Pro Leu Gly Pro Thr Gly Leu Pro Gly
1 5 10 15

Pro Met Gly Pro Ile Gly Lys Pro Gly Pro Lys Gly Glu
20 25

<210> 214

<211> 1176

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)..(1176)

<223> n = A, T, G, or C

<220>

EP 1 505 154 A1

<221> CDS

<222> (18)..(920)

<223>

<400> 214

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                   Met Arg Ile Trp Trp Leu Leu Leu Ala Ile Glu
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atc tgc aca ggg aac ata aac tca cag gac acc tgc agg caa ggg cac        98
Ile Cys Thr Gly Asn Ile Asn Ser Gln Asp Thr Cys Arg Gln Gly His
            15                  20                  25

cct ggc atc cct ggg aac ccc ggt cac aat ggt ctg cct gga aga gat       146
Pro Gly Ile Pro Gly Asn Pro Gly His Asn Gly Leu Pro Gly Arg Asp
        30                  35                  40

gga cga gac gga gcg aag ggt gac aaa ggc gat gca gga gaa cca gga       194
Gly Arg Asp Gly Ala Lys Gly Asp Lys Gly Asp Ala Gly Glu Pro Gly
    45                  50                  55

cgt cct ggc agc ccg ggg aag gat ggg acg agt gga gag aag gga gaa       242
Arg Pro Gly Ser Pro Gly Lys Asp Gly Thr Ser Gly Glu Lys Gly Glu
60                  65                  70                  75

cga gga gca gat gga aaa gtt gaa gca aaa ggc atc aaa ggt gat caa       290
Arg Gly Ala Asp Gly Lys Val Glu Ala Lys Gly Ile Lys Gly Asp Gln
                80                  85                  90

ggc tca aga gga tcc cca gga aaa cat ggc ccc aag ggg ctt gca ggg       338
Gly Ser Arg Gly Ser Pro Gly Lys His Gly Pro Lys Gly Leu Ala Gly
            95                  100                 105

ccc atg gga gag aag ggc ctc cga gga gag act ggg cct cag ggg cag       386
Pro Met Gly Glu Lys Gly Leu Arg Gly Glu Thr Gly Pro Gln Gly Gln
        110                 115                 120

aag ggg aat aag ggt gac gtg ggt ccc act ggt cct gag ggg cca agg       434
Lys Gly Asn Lys Gly Asp Val Gly Pro Thr Gly Pro Glu Gly Pro Arg
    125                 130                 135

ggc aac att ggg cct ttg ggc cca act ggt tta ccg ggc ccc atg ggc       482
Gly Asn Ile Gly Pro Leu Gly Pro Thr Gly Leu Pro Gly Pro Met Gly
140                 145                 150                 155

cct att gga aag cct ggt ccc aag gga gaa gct gga ccc acg ggg ccc       530
Pro Ile Gly Lys Pro Gly Pro Lys Gly Glu Ala Gly Pro Thr Gly Pro
                160                 165                 170

cag ggt gag cca gga gtc cgg gga ata aga ggc tgg aaa gga gat cga       578
Gln Gly Glu Pro Gly Val Arg Gly Ile Arg Gly Trp Lys Gly Asp Arg
            175                 180                 185
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gga gag aaa ggg aaa atc ggt gag act cta gtc ttg cca aaa agt gct 626
Gly Glu Lys Gly Lys Ile Gly Glu Thr Leu Val Leu Pro Lys Ser Ala
190 195 200

ttc act gtg ggg ctc acg gtg ctg agc aag ttt cct tct tca gat gtg 674
Phe Thr Val Gly Leu Thr Val Leu Ser Lys Phe Pro Ser Ser Asp Val
205 210 215

ccc att aaa ttt gat aag atc cac atc act gtt ttc tcc agg aat gtt 722
Pro Ile Lys Phe Asp Lys Ile His Ile Thr Val Phe Ser Arg Asn Val
220 225 230 235

cag gtg tct ttg gtc aaa aac gga gta aaa ata ctg cac acc aga gat 770
Gln Val Ser Leu Val Lys Asn Gly Val Lys Ile Leu His Thr Arg Asp
240 245 250

gct tac gtg agc tct gag gac cag gcc tct ggc agc att gtc ctg cag 818
Ala Tyr Val Ser Ser Glu Asp Gln Ala Ser Gly Ser Ile Val Leu Gln
255 260 265

ctg aag ctc ggg gat gag atg tgg tgt gtg att cat cgt gtg gca aaa 866
Leu Lys Leu Gly Asp Glu Met Trp Cys Val Ile His Arg Val Ala Lys
270 275 280

tgt ctc tcc atc tgt gat cct ttt aca gtg gcg tct tgt gtg cgc tct 914
Cys Leu Ser Ile Cys Asp Pro Phe Thr Val Ala Ser Cys Val Arg Ser
285 290 295

cga tga gggcaaggtc acctctgctt tgaggggccg ggtttagtgg tctcctaccc 970
Arg
300

agagtgtcgg gtccgggaac tgcttctgca tgagcccctt gctccacgtg aatctgaata 1030

gttcgttctg gcagtggcgg tgaattcgtc ctgccaggac ccgccctctg catacactca 1090

ggcgcacccc tgctaaagcc ctttaacttc agcgctacaa gtccttgctt aanaagccta 1150

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<210> 215

<211> 300

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)..(1176)

<223> n = A, T, G, or C

<400> 215

Met Arg Ile Trp Trp Leu Leu Leu Ala Ile Glu Ile Cys Thr Gly Asn
1 5 10 15

Ile Asn Ser Gln Asp Thr Cys Arg Gln Gly His Pro Gly Ile Pro Gly
20 25 30

Asn Pro Gly His Asn Gly Leu Pro Gly Arg Asp Gly Arg Asp Gly Ala
35 40 45

Lys Gly Asp Lys Gly Asp Ala Gly Glu Pro Gly Arg Pro Gly Ser Pro
50 55 60

Gly Lys Asp Gly Thr Ser Gly Glu Lys Gly Glu Arg Gly Ala Asp Gly
65 70 75 80

Lys Val Glu Ala Lys Gly Ile Lys Gly Asp Gln Gly Ser Arg Gly Ser
85 90 95

Pro Gly Lys His Gly Pro Lys Gly Leu Ala Gly Pro Met Gly Glu Lys
100 105 110

Gly Leu Arg Gly Glu Thr Gly Pro Gln Gly Gln Lys Gly Asn Lys Gly
115 120 125

Asp Val Gly Pro Thr Gly Pro Glu Gly Pro Arg Gly Asn Ile Gly Pro
130 135 140

Leu Gly Pro Thr Gly Leu Pro Gly Pro Met Gly Pro Ile Gly Lys Pro
145 150 155 160

Gly Pro Lys Gly Glu Ala Gly Pro Thr Gly Pro Gln Gly Glu Pro Gly
165 170 175

Val Arg Gly Ile Arg Gly Trp Lys Gly Asp Arg Gly Glu Lys Gly Lys
180 185 190

Ile Gly Glu Thr Leu Val Leu Pro Lys Ser Ala Phe Thr Val Gly Leu
195 200 205

Thr Val Leu Ser Lys Phe Pro Ser Ser Asp Val Pro Ile Lys Phe Asp
210 215 220

Lys Ile His Ile Thr Val Phe Ser Arg Asn Val Gln Val Ser Leu Val
225 230 235 240

Lys Asn Gly Val Lys Ile Leu His Thr Arg Asp Ala Tyr Val Ser Ser
245 250 255

Glu Asp Gln Ala Ser Gly Ser Ile Val Leu Gln Leu Lys Leu Gly Asp
260 265 270

Glu Met Trp Cys Val Ile His Arg Val Ala Lys Cys Leu Ser Ile Cys
275 280 285

Asp Pro Phe Thr Val Ala Ser Cys Val Arg Ser Arg
290 295 300

<210> 216

<211> 903

<212> DNA

<213> Homo sapiens

<400> 216
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ggaagagatg gacgagacgg agcgaagggt gacaaaggcg atgcaggaga accaggacgt 180

cctggcagcc cggggaagga tgggacgagt ggagagaagg gagaacgagg agcagatgga 240

aaagttgaag caaaaggcat caaaggtgat caaggctcaa gaggatcccc aggaaaacat 300

ggccccaagg ggcttgcagg gcccatggga gagaagggcc tccgaggaga gactgggcct 360

caggggcaga aggggaataa gggtgacgtg ggtcccactg gtcctgaggg gccaaggggc 420

aacattgggc ctttgggccc aactggttta ccgggcccca tgggccctat tggaaagcct 480

ggtcccaagg gagaagctgg acccacgggg ccccagggtg agccaggagt ccggggaata 540

agaggctgga aaggagatcg aggagagaaa gggaaaatcg gtgagactct agtcttgcca 600

aaaagtgctt tcactgtggg gctcacggtg ctgagcaagt ttccttcttc agatgtgccc 660

attaaatttg ataagatcca catcactgtt ttctccagga atgttcaggt gtctttggtc 720

aaaaacggag taaaaatact gcacaccaga gatgcttacg tgagctctga ggaccaggcc 780

tctggcagca ttgtcctgca gctgaagctc ggggatgaga tgtggtgtgt gattcatcgt 840

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tga 903

<210> 217

<211> 281

<212> PRT

<213> Homo sapiens

<400> 217

Gln Asp Thr Cys Arg Gln Gly His Pro Gly Ile Pro Gly Asn Pro Gly
1 5 10 15

His Asn Gly Leu Pro Gly Arg Asp Gly Arg Asp Gly Ala Lys Gly Asp
20 25 30

Lys Gly Asp Ala Gly Glu Pro Gly Arg Pro Gly Ser Pro Gly Lys Asp
35 40 45

Gly Thr Ser Gly Glu Lys Gly Glu Arg Gly Ala Asp Gly Lys Val Glu
50 55 60

Ala Lys Gly Ile Lys Gly Asp Gln Gly Ser Arg Gly Ser Pro Gly Lys
65 70 75 80

His Gly Pro Lys Gly Leu Ala Gly Pro Met Gly Glu Lys Gly Leu Arg
85 90 95

Gly Glu Thr Gly Pro Gln Gly Gln Lys Gly Asn Lys Gly Asp Val Gly
100 105 110

Pro Thr Gly Pro Glu Gly Pro Arg Gly Asn Ile Gly Pro Leu Gly Pro
115 120 125

Thr Gly Leu Pro Gly Pro Met Gly Pro Ile Gly Lys Pro Gly Pro Lys
130 135 140

Gly Glu Ala Gly Pro Thr Gly Pro Gln Gly Glu Pro Gly Val Arg Gly
145 150 155 160

Ile Arg Gly Trp Lys Gly Asp Arg Gly Glu Lys Gly Lys Ile Gly Glu
165 170 175

Thr Leu Val Leu Pro Lys Ser Ala Phe Thr Val Gly Leu Thr Val Leu
180 185 190

Ser Lys Phe Pro Ser Ser Asp Val Pro Ile Lys Phe Asp Lys Ile His
195 200 205

Ile Thr Val Phe Ser Arg Asn Val Gln Val Ser Leu Val Lys Asn Gly
210 215 220

Val Lys Ile Leu His Thr Arg Asp Ala Tyr Val Ser Ser Glu Asp Gln
225 230 235 240

Ala Ser Gly Ser Ile Val Leu Gln Leu Lys Leu Gly Asp Glu Met Trp
245 250 255

Cys Val Ile His Arg Val Ala Lys Cys Leu Ser Ile Cys Asp Pro Phe
260 265 270

Thr Val Ala Ser Cys Val Arg Ser Arg
275 280

<210> 218

<211> 27

<212> PRT

<213> Homo sapiens

<400> 218

Gly Leu Pro Gly Pro Met Gly Pro Ile Gly Lys Pro Gly Pro Lys Gly
1 5 10 15

Glu Ala Gly Pro Thr Gly Pro Gln Gly Glu Pro
20 25

<210> 219

<211> 27

<212> PRT

<213> Homo sapiens

<400> 219

Gly Ile Pro Gly Asn Pro Gly His Asn Gly Leu Pro Gly Arg Asp Gly
1 5 10 15

Arg Asp Gly Ala Lys Gly Asp Lys Gly Asp Ala
20 25

<210> 220

<211> 29

<212> PRT

<213> Homo sapiens

<400> 220

Gly Arg Asp Gly Ala Lys Gly Asp Lys Gly Asp Ala Gly Glu Pro Gly
1 5 10 15

Arg Pro Gly Ser Pro Gly Lys Asp Gly Thr Ser Gly Glu
20 25

<210> 221

<211> 29

<212> PRT

<213> Homo sapiens

<400> 221

Gly Ile Pro Gly Asn Pro Gly His Asn Gly Leu Pro Gly Arg Asp Gly
1 5 10 15

Arg Asp Gly Ala Lys Gly Asp Lys Gly Asp Ala Gly Glu
20 25

<210> 222

<211> 29

<212> PRT

<213> Homo sapiens

<400> 222

Gly Asp Gln Gly Ser Arg Gly Ser Pro Gly Lys His Gly Pro Lys Gly
1 5 10 15

Leu Ala Gly Pro Met Gly Glu Lys Gly Leu Arg Gly Glu
20 25

<210> 223

<211> 27

<212> PRT

<213> Homo sapiens

<400> 223

Gly His Pro Gly Ile Pro Gly Asn Pro Gly His Asn Gly Leu Pro Gly
1 5 10 15

Arg Asp Gly Arg Asp Gly Ala Lys Gly Asp Lys
20 25

<210> 224

<211> 27

<212> PRT

<213> Homo sapiens

<400> 224

Gly Leu Pro Gly Arg Asp Gly Arg Asp Gly Ala Lys Gly Asp Lys Gly

1 5 10 15

Asp Ala Gly Glu Pro Gly Arg Pro Gly Ser Pro
20 25

<210> 225

<211> 27

<212> PRT

<213> Homo sapiens

<400> 225

Gly Asn Pro Gly His Asn Gly Leu Pro Gly Arg Asp Gly Arg Asp Gly
1 5 10 15

Ala Lys Gly Asp Lys Gly Asp Ala Gly Glu Pro
20 25

<210> 226

<211> 29

<212> PRT

<213> Homo sapiens

<400> 226

Gly His Pro Gly Ile Pro Gly Asn Pro Gly His Asn Gly Leu Pro Gly
1 5 10 15

Arg Asp Gly Arg Asp Gly Ala Lys Gly Asp Lys Gly Asp
20 25

<210> 227

<211> 27

<212> PRT

<213> Homo sapiens

<400> 227

Gly Lys Pro Gly Pro Lys Gly Glu Ala Gly Pro Thr Gly Pro Gln Gly
1 5 10 15

Glu Pro Gly Val Arg Gly Ile Arg Gly Trp Lys
20 25

<210> 228

<211> 27

<212> PRT

<213> Homo sapiens

<400> 228

Gly Asp Lys Gly Asp Ala Gly Glu Pro Gly Arg Pro Gly Ser Pro Gly
1 5 10 15

Lys Asp Gly Thr Ser Gly Glu Lys Gly Glu Arg
20 25

<210> 229

<211> 29

<212> PRT

<213> Homo sapiens

<400> 229

Gly Ala Lys Gly Asp Lys Gly Asp Ala Gly Glu Pro Gly Arg Pro Gly
1 5 10 15

Ser Pro Gly Lys Asp Gly Thr Ser Gly Glu Lys Gly Glu
20 25

<210> 230

<211> 29

<212> PRT

<213> Homo sapiens

<400> 230

Gly Pro Lys Gly Glu Ala Gly Pro Thr Gly Pro Gln Gly Glu Pro Gly
1 5 10 15

Val Arg Gly Ile Arg Gly Trp Lys Gly Asp Arg Gly Glu
20 25

<210> 231

<211> 20

<212> PRT

<213> Homo sapiens

<400> 231

Asp Gln Ala Ser Gly Ser Ile Val Leu Gln Leu Lys Leu Gly Asp Glu
1 5 10 15

Met Trp Cys Val
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<210> 232

<211> 27

<212> PRT

<213> Homo sapiens

<400> 232

Gly Pro Ile Gly Lys Pro Gly Pro Lys Gly Glu Ala Gly Pro Thr Gly
1 5 10 15

Pro Gln Gly Glu Pro Gly Val Arg Gly Ile Arg
20 25

<210> 233

<211> 22

<212> PRT

<213> Homo sapiens

<400> 233

Asp Gln Ala Ser Gly Ser Ile Val Leu Gln Leu Lys Leu Gly Asp Glu
1 5 10 15

Met Trp Cys Val Ile His
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<210> 234

<211> 29

<212> PRT

<213> Homo sapiens

<400> 234

Gly Asp Lys Gly Asp Ala Gly Glu Pro Gly Arg Pro Gly Ser Pro Gly
1 5 10 15

Lys Asp Gly Thr Ser Gly Glu Lys Gly Glu Arg Gly Ala
20 25

<210> 235

<211> 29

<212> PRT

<213> Homo sapiens

<400> 235

Gly Pro Glu Gly Pro Arg Gly Asn Ile Gly Pro Leu Gly Pro Thr Gly
1 5 10 15

Leu Pro Gly Pro Met Gly Pro Ile Gly Lys Pro Gly Pro
20 25

<210> 236

<211> 27

<212> PRT

<213> Homo sapiens

<400> 236

Gly Ala Lys Gly Asp Lys Gly Asp Ala Gly Glu Pro Gly Arg Pro Gly
1 5 10 15

Ser Pro Gly Lys Asp Gly Thr Ser Gly Glu Lys
20 25

<210> 237

<211> 27

<212> PRT

<213> Homo sapiens

<400> 237

Gly Ser Pro Gly Lys Asp Gly Thr Ser Gly Glu Lys Gly Glu Arg Gly
1 5 10 15

Ala Asp Gly Lys Val Glu Ala Lys Gly Ile Lys
20 25

<210> 238

<211> 27

<212> PRT

<213> Homo sapiens

<400> 238

Cys Arg Gln Gly His Pro Gly Ile Pro Gly Asn Pro Gly His Asn Gly
1 5 10 15

Leu Pro Gly Arg Asp Gly Arg Asp Gly Ala Lys
20 25

<210> 239

<211> 29

<212> PRT

<213> Homo sapiens

<400> 239

Gly Pro Arg Gly Asn Ile Gly Pro Leu Gly Pro Thr Gly Leu Pro Gly
1 5 10 15

Pro Met Gly Pro Ile Gly Lys Pro Gly Pro Lys Gly Glu
20 25

<210> 240

<211> 1026

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (25)..(1026)

<223>

<400> 240

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Met Arg Ile Trp Trp Leu Leu Leu Ala
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att gaa atc tgc aca ggg aac ata aac tca cag gac acc tgc agg caa 99
Ile Glu Ile Cys Thr Gly Asn Ile Asn Ser Gln Asp Thr Cys Arg Gln
10 15 20 25

ggg cac cct ggc atc cct ggg aac ccc ggt cac aat ggt ctg cct gga 147
Gly His Pro Gly Ile Pro Gly Asn Pro Gly His Asn Gly Leu Pro Gly
30 35 40

aga gat gga cga gac gga gcg aag ggt gac aaa ggc gat gca gga gaa 195
Arg Asp Gly Arg Asp Gly Ala Lys Gly Asp Lys Gly Asp Ala Gly Glu

```
            45                  50                  55

cca gga cgt cct ggc agc ccg ggg aag gat ggg acg agt gga gag aag      243
Pro Gly Arg Pro Gly Ser Pro Gly Lys Asp Gly Thr Ser Gly Glu Lys
        60                  65                  70

gga gaa cga gga gca gat gga aaa gtt gaa gca aaa ggc atc aaa ggt      291
Gly Glu Arg Gly Ala Asp Gly Lys Val Glu Ala Lys Gly Ile Lys Gly
    75                  80                  85

gat caa ggc tca aga gga tcc cca gga aaa cat ggc ccc aag ggg ctt      339
Asp Gln Gly Ser Arg Gly Ser Pro Gly Lys His Gly Pro Lys Gly Leu
90                  95                  100                 105

gca ggg ccc atg gga gag aag ggc ctc cga gga gag act ggg cct cag      387
Ala Gly Pro Met Gly Glu Lys Gly Leu Arg Gly Glu Thr Gly Pro Gln
                110                 115                 120

ggg cag aag ggg aat aag ggt gac gtg ggt ccc act ggt cct gag ggg      435
Gly Gln Lys Gly Asn Lys Gly Asp Val Gly Pro Thr Gly Pro Glu Gly
            125                 130                 135

cca agg ggc aac att ggg cct ttg ggc cca act ggt tta ccg ggc ccc      483
Pro Arg Gly Asn Ile Gly Pro Leu Gly Pro Thr Gly Leu Pro Gly Pro
        140                 145                 150

atg ggc cct att gga aag cct ggt ccc aaa gga gaa gct gga ccc acg      531
Met Gly Pro Ile Gly Lys Pro Gly Pro Lys Gly Glu Ala Gly Pro Thr
    155                 160                 165

ggg ccc cag ggt gag cca gga gtc cag gga ata aga ggc tgg aaa gga      579
Gly Pro Gln Gly Glu Pro Gly Val Gln Gly Ile Arg Gly Trp Lys Gly
170                 175                 180                 185

gat cga gga gag aaa ggg aaa atc ggt gag act cta gtc ttg cca aaa      627
Asp Arg Gly Glu Lys Gly Lys Ile Gly Glu Thr Leu Val Leu Pro Lys
                190                 195                 200

agt gct ttc act gtg ggg ctc acg gtg ctg agc aag ttt cct tct tca      675
Ser Ala Phe Thr Val Gly Leu Thr Val Leu Ser Lys Phe Pro Ser Ser
            205                 210                 215

gat agg ccc att aaa ttt gat aag atc ctg tat aac gaa ttc aac cat      723
Asp Arg Pro Ile Lys Phe Asp Lys Ile Leu Tyr Asn Glu Phe Asn His
        220                 225                 230

tat gat aca gca gcg ggg aaa ttc acg tgc cac att gct ggg gtc tat      771
Tyr Asp Thr Ala Ala Gly Lys Phe Thr Cys His Ile Ala Gly Val Tyr
    235                 240                 245

tac ttc acc tac cac atc act gtt ttc tcc aga aat gtt cag gtg tct      819
Tyr Phe Thr Tyr His Ile Thr Val Phe Ser Arg Asn Val Gln Val Ser
250                 255                 260                 265

ttg gtc aaa aat gga gta aaa ata ctg cac acc aaa gat gct tac atg      867
Leu Val Lys Asn Gly Val Lys Ile Leu His Thr Lys Asp Ala Tyr Met
                270                 275                 280
```

```
agc tct gag gac cag gcc tct ggc ggc att gtc ctg cag ctg aag ctc      915
Ser Ser Glu Asp Gln Ala Ser Gly Gly Ile Val Leu Gln Leu Lys Leu
            285                 290                 295

ggg gat gag gtg tgg ctg cag gtg aca gga gga gag agg ttc aat ggc      963
Gly Asp Glu Val Trp Leu Gln Val Thr Gly Gly Glu Arg Phe Asn Gly
        300                 305                 310

ttg ttt gct gat gag gac gat gac aca act ttc aca ggg ttc ctt ctg     1011
Leu Phe Ala Asp Glu Asp Asp Asp Thr Thr Phe Thr Gly Phe Leu Leu
    315                 320                 325

ttc agc agc ccg tga                                                1026
Phe Ser Ser Pro
330
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<210> 241

<211> 333

<212> PRT

<213> Homo sapiens

<400> 241

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Met Arg Ile Trp Trp Leu Leu Leu Ala Ile Glu Ile Cys Thr Gly Asn
1               5                   10                  15

Ile Asn Ser Gln Asp Thr Cys Arg Gln Gly His Pro Gly Ile Pro Gly
            20                  25                  30

Asn Pro Gly His Asn Gly Leu Pro Gly Arg Asp Gly Arg Asp Gly Ala
        35                  40                  45

Lys Gly Asp Lys Gly Asp Ala Gly Glu Pro Gly Arg Pro Gly Ser Pro
    50                  55                  60

Gly Lys Asp Gly Thr Ser Gly Glu Lys Gly Glu Arg Gly Ala Asp Gly
65                  70                  75                  80

Lys Val Glu Ala Lys Gly Ile Lys Gly Asp Gln Gly Ser Arg Gly Ser
                85                  90                  95

Pro Gly Lys His Gly Pro Lys Gly Leu Ala Gly Pro Met Gly Glu Lys
            100                 105                 110
```

Gly Leu Arg Gly Glu Thr Gly Pro Gln Gly Gln Lys Gly Asn Lys Gly
115 120 125

Asp Val Gly Pro Thr Gly Pro Glu Gly Pro Arg Gly Asn Ile Gly Pro
130 135 140

Leu Gly Pro Thr Gly Leu Pro Gly Pro Met Gly Pro Ile Gly Lys Pro
145 150 155 160

Gly Pro Lys Gly Glu Ala Gly Pro Thr Gly Pro Gln Gly Glu Pro Gly
165 170 175

Val Gln Gly Ile Arg Gly Trp Lys Gly Asp Arg Gly Glu Lys Gly Lys
180 185 190

Ile Gly Glu Thr Leu Val Leu Pro Lys Ser Ala Phe Thr Val Gly Leu
195 200 205

Thr Val Leu Ser Lys Phe Pro Ser Ser Asp Arg Pro Ile Lys Phe Asp
210 215 220

Lys Ile Leu Tyr Asn Glu Phe Asn His Tyr Asp Thr Ala Ala Gly Lys
225 230 235 240

Phe Thr Cys His Ile Ala Gly Val Tyr Tyr Phe Thr Tyr His Ile Thr
245 250 255

Val Phe Ser Arg Asn Val Gln Val Ser Leu Val Lys Asn Gly Val Lys
260 265 270

Ile Leu His Thr Lys Asp Ala Tyr Met Ser Ser Glu Asp Gln Ala Ser
275 280 285

Gly Gly Ile Val Leu Gln Leu Lys Leu Gly Asp Glu Val Trp Leu Gln
290 295 300

Val Thr Gly Gly Glu Arg Phe Asn Gly Leu Phe Ala Asp Glu Asp Asp
305 310 315 320

Asp Thr Thr Phe Thr Gly Phe Leu Leu Phe Ser Ser Pro
325 330

<210> 242

<211> 1002

<212> DNA

<213> Homo sapiens

<400> 242
atgaggatct ggtggcttct gcttgccatt gaaatctgca cagggaacat aaactcacag 60

gacacctgca ggcaagggca ccctggcatc cctgggaacc ccggtcacaa tggtctgcct 120

ggaagagatg gacgagacgg agcgaagggt gacaaaggcg atgcaggaga accaggacgt 180

cctggcagcc cggggaagga tgggacgagt ggagagaagg gagaacgagg agcagatgga 240

aaagttgaag caaaaggcat caaaggtgat caaggctcaa gaggatcccc aggaaaacat 300

ggccccaagg ggcttgcagg gcccatggga gagaagggcc tccgaggaga gactgggcct 360

caggggcaga aggggaataa gggtgacgtg ggtcccactg gtcctgaggg gccaaggggc 420

aacattgggc ctttgggccc aactggttta ccgggcccca tgggccctat tggaaagcct 480

ggtcccaaag gagaagctgg acccacgggg ccccagggtg agccaggagt ccagggaata 540

agaggctgga aaggagatcg aggagagaaa gggaaaatcg gtgagactct agtcttgcca 600

aaaagtgctt tcactgtggg gctcacggtg ctgagcaagt ttccttcttc agataggccc 660

attaaatttg ataagatcct gtataacgaa ttcaaccatt atgatacagc agcggggaaa 720

ttcacgtgcc acattgctgg ggtctattac ttcacctacc acatcactgt tttctccaga 780

aatgttcagg tgtctttggt caaaaatgga gtaaaaatac tgcacaccaa agatgcttac 840

atgagctctg aggaccaggc ctctggcggc attgtcctgc agctgaagct cggggatgag 900

gtgtggctgc aggtgacagg aggagagagg ttcaatggct tgtttgctga tgaggacgat 960

gacacaactt tcacagggtt ccttctgttc agcagcccgt ga 1002

<210> 243

<211> 314

<212> PRT

<213> Homo sapiens

<400> 243

Gln Asp Thr Cys Arg Gln Gly His Pro Gly Ile Pro Gly Asn Pro Gly
1 5 10 15

His Asn Gly Leu Pro Gly Arg Asp Gly Arg Asp Gly Ala Lys Gly Asp
20 25 30

Lys Gly Asp Ala Gly Glu Pro Gly Arg Pro Gly Ser Pro Gly Lys Asp
35 40 45

Gly Thr Ser Gly Glu Lys Gly Glu Arg Gly Ala Asp Gly Lys Val Glu
50 55 60

Ala Lys Gly Ile Lys Gly Asp Gln Gly Ser Arg Gly Ser Pro Gly Lys
65 70 75 80

His Gly Pro Lys Gly Leu Ala Gly Pro Met Gly Glu Lys Gly Leu Arg
85 90 95

Gly Glu Thr Gly Pro Gln Gly Gln Lys Gly Asn Lys Gly Asp Val Gly
100 105 110

Pro Thr Gly Pro Glu Gly Pro Arg Gly Asn Ile Gly Pro Leu Gly Pro
115 120 125

Thr Gly Leu Pro Gly Pro Met Gly Pro Ile Gly Lys Pro Gly Pro Lys
130 135 140

Gly Glu Ala Gly Pro Thr Gly Pro Gln Gly Glu Pro Gly Val Gln Gly
145 150 155 160

Ile Arg Gly Trp Lys Gly Asp Arg Gly Glu Lys Gly Lys Ile Gly Glu
165 170 175

Thr Leu Val Leu Pro Lys Ser Ala Phe Thr Val Gly Leu Thr Val Leu
180 185 190

Ser Lys Phe Pro Ser Ser Asp Arg Pro Ile Lys Phe Asp Lys Ile Leu
195 200 205

Tyr Asn Glu Phe Asn His Tyr Asp Thr Ala Ala Gly Lys Phe Thr Cys
210 215 220

Replacement Sheet

His Ile Ala Gly Val Tyr Tyr Phe Thr Tyr His Ile Thr Val Phe Ser
225 230 235 240

Arg Asn Val Gln Val Ser Leu Val Lys Asn Gly Val Lys Ile Leu His
245 250 255

Thr Lys Asp Ala Tyr Met Ser Ser Glu Asp Gln Ala Ser Gly Gly Ile
260 265 270

Val Leu Gln Leu Lys Leu Gly Asp Glu Val Trp Leu Gln Val Thr Gly
275 280 285

Gly Glu Arg Phe Asn Gly Leu Phe Ala Asp Glu Asp Asp Asp Thr Thr
290 295 300

Phe Thr Gly Phe Leu Leu Phe Ser Ser Pro
305 310

<210> 244

<211> 36

<212> PRT

<213> Homo sapiens

<400> 244

Pro Ile Lys Phe Asp Lys Ile Leu Tyr Asn Glu Phe Asn His Tyr Asp
1 5 10 15

Thr Ala Ala Gly Lys Phe Thr Cys His Ile Ala Gly Val Tyr Tyr Phe
20 25 30

Thr Tyr His Ile
35

<210> 245

<211> 22

<212> PRT

<213> Homo sapiens

<400> 245

Asp Gln Ala Ser Gly Gly Ile Val Leu Gln Leu Lys Leu Gly Asp Glu
1 5 10 15

Val Trp Leu Gln Val Thr
20

<210> 246

<211> 20

<212> PRT

<213> Homo sapiens

<400> 246

Asp Gln Ala Ser Gly Gly Ile Val Leu Gln Leu Lys Leu Gly Asp Glu
1 5 10 15

Val Trp Leu Gln
20

<210> 247

<211> 20

<212> PRT

<213> Homo sapiens

<400> 247

Phe Thr Cys His Ile Ala Gly Val Tyr Tyr Phe Thr Tyr His Ile Thr
1 5 10 15

Val Phe Ser Arg
20

<210> 248

<211> 27

<212> PRT

<213> Homo sapiens

<400> 248

Phe Pro Ser Ser Asp Arg Pro Ile Lys Phe Asp Lys Ile Leu Tyr Asn
1 5 10 15

Glu Phe Asn His Tyr Asp Thr Ala Ala Gly Lys
20 25

<210> 249

<211> 27

<212> PRT

<213> Homo sapiens

<400> 249

Gly Leu Pro Gly Pro Met Gly Pro Ile Gly Lys Pro Gly Pro Lys Gly
1 5 10 15

Glu Ala Gly Pro Thr Gly Pro Gln Gly Glu Pro
20 25

<210> 250

<211> 27

<212> PRT

<213> Homo sapiens

<400> 250

Gly Ile Pro Gly Asn Pro Gly His Asn Gly Leu Pro Gly Arg Asp Gly
1 5 10 15

Arg Asp Gly Ala Lys Gly Asp Lys Gly Asp Ala
20 25

<210> 251

<211> 29

<212> PRT

<213> Homo sapiens

<400> 251

Gly Arg Asp Gly Ala Lys Gly Asp Lys Gly Asp Ala Gly Glu Pro Gly
1 5 10 15

Arg Pro Gly Ser Pro Gly Lys Asp Gly Thr Ser Gly Glu
20 25

<210> 252

<211> 29

<212> PRT

<213> Homo sapiens

<400> 252

Gly Ile Pro Gly Asn Pro Gly His Asn Gly Leu Pro Gly Arg Asp Gly
1 5 10 15

Arg Asp Gly Ala Lys Gly Asp Lys Gly Asp Ala Gly Glu
20 25

<210> 253

<211> 29

<212> PRT

<213> Homo sapiens

<400> 253

Gly Asp Gln Gly Ser Arg Gly Ser Pro Gly Lys His Gly Pro Lys Gly
1 5 10 15

Leu Ala Gly Pro Met Gly Glu Lys Gly Leu Arg Gly Glu
20 25

<210> 254

<211> 27

<212> PRT

<213> Homo sapiens

<400> 254

Gly His Pro Gly Ile Pro Gly Asn Pro Gly His Asn Gly Leu Pro Gly
1 5 10 15

Arg Asp Gly Arg Asp Gly Ala Lys Gly Asp Lys
20 25

<210> 255

<211> 27

<212> PRT

<213> Homo sapiens

<400> 255

Gly Leu Pro Gly Arg Asp Gly Arg Asp Gly Ala Lys Gly Asp Lys Gly
1 5 10 15

Asp Ala Gly Glu Pro Gly Arg Pro Gly Ser Pro
20 25

<210> 256

<211> 27

<212> PRT

<213> Homo sapiens

<400> 256

Gly Lys Pro Gly Pro Lys Gly Glu Ala Gly Pro Thr Gly Pro Gln Gly
1 5 10 15

Glu Pro Gly Val Gln Gly Ile Arg Gly Trp Lys

20 25

<210> 257

<211> 27

<212> PRT

<213> Homo sapiens

<400> 257

Gly Asn Pro Gly His Asn Gly Leu Pro Gly Arg Asp Gly Arg Asp Gly
1 5 10 15

Ala Lys Gly Asp Lys Gly Asp Ala Gly Glu Pro
20 25

<210> 258

<211> 29

<212> PRT

<213> Homo sapiens

<400> 258

Gly His Pro Gly Ile Pro Gly Asn Pro Gly His Asn Gly Leu Pro Gly
1 5 10 15

Arg Asp Gly Arg Asp Gly Ala Lys Gly Asp Lys Gly Asp
20 25

<210> 259

<211> 27

<212> PRT

<213> Homo sapiens

<400> 259

Gly Asp Lys Gly Asp Ala Gly Glu Pro Gly Arg Pro Gly Ser Pro Gly
1 5 10 15

Lys Asp Gly Thr Ser Gly Glu Lys Gly Glu Arg
20 25

<210> 260

<211> 29

<212> PRT

<213> Homo sapiens

<400> 260

Gly Ala Lys Gly Asp Lys Gly Asp Ala Gly Glu Pro Gly Arg Pro Gly
1 5 10 15

Ser Pro Gly Lys Asp Gly Thr Ser Gly Glu Lys Gly Glu
20 25

<210> 261

<211> 29

<212> PRT

<213> Homo sapiens

<400> 261

Gly Pro Lys Gly Glu Ala Gly Pro Thr Gly Pro Gln Gly Glu Pro Gly
1 5 10 15

Val Gln Gly Ile Arg Gly Trp Lys Gly Asp Arg Gly Glu
20 25

<210> 262

<211> 29

<212> PRT

<213> Homo sapiens

<400> 262

Gly Asp Lys Gly Asp Ala Gly Glu Pro Gly Arg Pro Gly Ser Pro Gly
1 5 10 15

Lys Asp Gly Thr Ser Gly Glu Lys Gly Glu Arg Gly Ala
20 25

<210> 263

<211> 29

<212> PRT

<213> Homo sapiens

<400> 263

Gly Pro Glu Gly Pro Arg Gly Asn Ile Gly Pro Leu Gly Pro Thr Gly
1 5 10 15

Leu Pro Gly Pro Met Gly Pro Ile Gly Lys Pro Gly Pro
20 25

<210> 264

<211> 11

<212> PRT

<213> Homo sapiens

<400> 264

Asp Asp Thr Thr Phe Thr Gly Phe Leu Leu Phe
1 5 10

<210> 265

<211> 27

<212> PRT

<213> Homo sapiens

<400> 265

Gly Pro Ile Gly Lys Pro Gly Pro Lys Gly Glu Ala Gly Pro Thr Gly
1 5 10 15

Pro Gln Gly Glu Pro Gly Val Gln Gly Ile Arg
20 25

<210> 266

<211> 10

<212> PRT

<213> Homo sapiens

<400> 266

Thr Thr Phe Thr Gly Phe Leu Leu Phe Ser
1 5 10

<210> 267

<211> 27

<212> PRT

<213> Homo sapiens

<400> 267

Gly Ala Lys Gly Asp Lys Gly Asp Ala Gly Glu Pro Gly Arg Pro Gly
1 5 10 15

Ser Pro Gly Lys Asp Gly Thr Ser Gly Glu Lys
20 25

<210> 268

<211> 27

<212> PRT

<213> Homo sapiens

<400> 268

Gly Ser Pro Gly Lys Asp Gly Thr Ser Gly Glu Lys Gly Glu Arg Gly

1 5 10 15

Ala Asp Gly Lys Val Glu Ala Lys Gly Ile Lys
20 25

<210> 269

<211> 27

<212> PRT

<213> Homo sapiens

<400> 269

Cys Arg Gln Gly His Pro Gly Ile Pro Gly Asn Pro Gly His Asn Gly
1 5 10 15

Leu Pro Gly Arg Asp Gly Arg Asp Gly Ala Lys
20 25

<210> 270

<211> 29

<212> PRT

<213> Homo sapiens

<400> 270

Gly Pro Arg Gly Asn Ile Gly Pro Leu Gly Pro Thr Gly Leu Pro Gly
1 5 10 15

Pro Met Gly Pro Ile Gly Lys Pro Gly Pro Lys Gly Glu
20 25

<210> 271

<211> 945

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (25)..(945)

<223>

<400> 271

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tcagttcagt ctgtcatctg aacc atg agg atc tgg tgg ctt ctg ctt gcc      51
                           Met Arg Ile Trp Trp Leu Leu Leu Ala
                           1               5

att gaa atc tgc aca ggg aac ata aac tca cag gac acc tgc agg caa      99
Ile Glu Ile Cys Thr Gly Asn Ile Asn Ser Gln Asp Thr Cys Arg Gln
10                  15                  20                  25

ggg cac cct ggc atc cct ggg aac ccc ggt cac aat ggt ctg cct gga     147
Gly His Pro Gly Ile Pro Gly Asn Pro Gly His Asn Gly Leu Pro Gly
                30                  35                  40

aga gat gga cga gac gga gcg aag ggt gac aaa ggc gat gca gga gaa     195
Arg Asp Gly Arg Asp Gly Ala Lys Gly Asp Lys Gly Asp Ala Gly Glu
            45                  50                  55

cca gga cgt cct ggc agc ccg ggg aag gat ggg acg agt gga gag aag     243
Pro Gly Arg Pro Gly Ser Pro Gly Lys Asp Gly Thr Ser Gly Glu Lys
        60                  65                  70

gga gaa cga gga gca gat gga aaa gtt gaa gca aaa ggc atc aaa ggt     291
Gly Glu Arg Gly Ala Asp Gly Lys Val Glu Ala Lys Gly Ile Lys Gly
    75                  80                  85

gat caa ggc tca aga gga tcc cca gga aaa cat ggc ccc aag ggg ctt     339
Asp Gln Gly Ser Arg Gly Ser Pro Gly Lys His Gly Pro Lys Gly Leu
90                  95                  100                 105

gca ggg ccc atg gga gag aag ggc ctc cga gga gag act ggg cct cag     387
Ala Gly Pro Met Gly Glu Lys Gly Leu Arg Gly Glu Thr Gly Pro Gln
                110                 115                 120

ggg cag aag ggg aat aag ggt gac gtg ggt ccc act ggt cct gag ggg     435
Gly Gln Lys Gly Asn Lys Gly Asp Val Gly Pro Thr Gly Pro Glu Gly
            125                 130                 135

cca agg ggc aac att ggg cct ttg ggc cca act ggt tta ccg ggc ccc     483
Pro Arg Gly Asn Ile Gly Pro Leu Gly Pro Thr Gly Leu Pro Gly Pro
        140                 145                 150

atg ggc cct att gga aag cct ggt ccc aaa gga gaa gct gga ccc acg     531
Met Gly Pro Ile Gly Lys Pro Gly Pro Lys Gly Glu Ala Gly Pro Thr
    155                 160                 165

ggg ccc cag ggt gag cca gga gtc cag gga ata aga ggc tgg aaa gga     579
Gly Pro Gln Gly Glu Pro Gly Val Gln Gly Ile Arg Gly Trp Lys Gly
```

```
170                 175                 180                 185

gat cga gga gag aaa ggg aaa atc ggt gag act cta gtc ttg cca aaa      627
Asp Arg Gly Glu Lys Gly Lys Ile Gly Glu Thr Leu Val Leu Pro Lys
                190                 195                 200

agt gct ttc act gtg ggg ctc acg gtg ctg agc aag ttt cct tct tca      675
Ser Ala Phe Thr Val Gly Leu Thr Val Leu Ser Lys Phe Pro Ser Ser
            205                 210                 215

gat agg ccc att aaa ttt gat aag atc cac atc act gtt ttc tcc aga      723
Asp Arg Pro Ile Lys Phe Asp Lys Ile His Ile Thr Val Phe Ser Arg
        220                 225                 230

aat gtt cag gtg tct ttg gtc aaa aat gga gta aaa ata ctg cac acc      771
Asn Val Gln Val Ser Leu Val Lys Asn Gly Val Lys Ile Leu His Thr
    235                 240                 245

aaa gat gct tac atg agc tct gag gac cag gcc tct ggc ggc att gtc      819
Lys Asp Ala Tyr Met Ser Ser Glu Asp Gln Ala Ser Gly Gly Ile Val
250                 255                 260                 265

ctg cag ctg aag ctc ggg gat gag gtg tgg ctg cag gtg aca gga gga      867
Leu Gln Leu Lys Leu Gly Asp Glu Val Trp Leu Gln Val Thr Gly Gly
                270                 275                 280

gag agg ttc aat ggc ttg ttt gct gat gag gac gat gac aca act ttc      915
Glu Arg Phe Asn Gly Leu Phe Ala Asp Glu Asp Asp Asp Thr Thr Phe
            285                 290                 295

aca ggg ttc ctt ctg ttc agc agc ccg tga                             945
Thr Gly Phe Leu Leu Phe Ser Ser Pro
        300                 305
```

<210> 272

<211> 306

<212> PRT

<213> Homo sapiens

<400> 272

```
Met Arg Ile Trp Trp Leu Leu Leu Ala Ile Glu Ile Cys Thr Gly Asn
1               5                   10                  15

Ile Asn Ser Gln Asp Thr Cys Arg Gln Gly His Pro Gly Ile Pro Gly
            20                  25                  30

Asn Pro Gly His Asn Gly Leu Pro Gly Arg Asp Gly Arg Asp Gly Ala
        35                  40                  45
```

Lys Gly Asp Lys Gly Asp Ala Gly Glu Pro Gly Arg Pro Gly Ser Pro
50 55 60

Gly Lys Asp Gly Thr Ser Gly Glu Lys Gly Glu Arg Gly Ala Asp Gly
65 70 75 80

Lys Val Glu Ala Lys Gly Ile Lys Gly Asp Gln Gly Ser Arg Gly Ser
85 90 95

Pro Gly Lys His Gly Pro Lys Gly Leu Ala Gly Pro Met Gly Glu Lys
100 105 110

Gly Leu Arg Gly Glu Thr Gly Pro Gln Gly Gln Lys Gly Asn Lys Gly
115 120 125

Asp Val Gly Pro Thr Gly Pro Glu Gly Pro Arg Gly Asn Ile Gly Pro
130 135 140

Leu Gly Pro Thr Gly Leu Pro Gly Pro Met Gly Pro Ile Gly Lys Pro
145 150 155 160

Gly Pro Lys Gly Glu Ala Gly Pro Thr Gly Pro Gln Gly Glu Pro Gly
165 170 175

Val Gln Gly Ile Arg Gly Trp Lys Gly Asp Arg Gly Glu Lys Gly Lys
180 185 190

Ile Gly Glu Thr Leu Val Leu Pro Lys Ser Ala Phe Thr Val Gly Leu
195 200 205

Thr Val Leu Ser Lys Phe Pro Ser Ser Asp Arg Pro Ile Lys Phe Asp
210 215 220

Lys Ile His Ile Thr Val Phe Ser Arg Asn Val Gln Val Ser Leu Val
225 230 235 240

Lys Asn Gly Val Lys Ile Leu His Thr Lys Asp Ala Tyr Met Ser Ser
245 250 255

Glu Asp Gln Ala Ser Gly Gly Ile Val Leu Gln Leu Lys Leu Gly Asp
260 265 270

Glu Val Trp Leu Gln Val Thr Gly Gly Glu Arg Phe Asn Gly Leu Phe
275 280 285

Ala Asp Glu Asp Asp Asp Thr Thr Phe Thr Gly Phe Leu Leu Phe Ser
290 295 300

Ser Pro
305

<210> 273

<211> 921

<212> DNA

<213> Homo sapiens

<400> 273
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gacacctgca ggcaagggca ccctggcatc cctgggaacc ccggtcacaa tggtctgcct 120

ggaagagatg gacgagacgg agcgaagggt gacaaaggcg atgcaggaga accaggacgt 180

cctggcagcc cggggaagga tgggacgagt ggagagaagg gagaacgagg agcagatgga 240

aaagttgaag caaaaggcat caaaggtgat caaggctcaa gaggatcccc aggaaaacat 300

ggccccaagg ggcttgcagg gcccatggga gagaagggcc tccgaggaga gactgggcct 360

caggggcaga aggggaataa gggtgacgtg ggtcccactg gtcctgaggg gccaaggggc 420

aacattgggc ctttgggccc aactggttta ccgggcccca tgggccctat tggaaagcct 480

ggtcccaaag gagaagctgg acccacgggg ccccagggtg agccaggagt ccagggaata 540

agaggctgga aaggagatcg aggagagaaa gggaaaatcg gtgagactct agtcttgcca 600

aaaagtgctt tcactgtggg gctcacggtg ctgagcaagt ttccttcttc agataggccc 660

attaaatttg ataagatcca catcactgtt ttctccagaa atgttcaggt gtctttggtc 720

aaaaatggag taaaaatact gcacaccaaa gatgcttaca tgagctctga ggaccaggcc 780

tctggcggca ttgtcctgca gctgaagctc ggggatgagg tgtggctgca ggtgacagga 840

ggagagaggt tcaatggctt gtttgctgat gaggacgatg acacaacttt cacagggttc 900

cttctgttca gcagcccgtg a 921

Replacement Sheet

<210> 274

<211> 287

<212> PRT

<213> Homo sapiens

<400> 274

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Gln Asp Thr Cys Arg Gln Gly His Pro Gly Ile Pro Gly Asn Pro Gly
1               5                  10                  15

His Asn Gly Leu Pro Gly Arg Asp Gly Arg Asp Gly Ala Lys Gly Asp
            20                  25                  30

Lys Gly Asp Ala Gly Glu Pro Gly Arg Pro Gly Ser Pro Gly Lys Asp
        35                  40                  45

Gly Thr Ser Gly Glu Lys Gly Glu Arg Gly Ala Asp Gly Lys Val Glu
    50                  55                  60

Ala Lys Gly Ile Lys Gly Asp Gln Gly Ser Arg Gly Ser Pro Gly Lys
65                  70                  75                  80

His Gly Pro Lys Gly Leu Ala Gly Pro Met Gly Glu Lys Gly Leu Arg
                85                  90                  95

Gly Glu Thr Gly Pro Gln Gly Gln Lys Gly Asn Lys Gly Asp Val Gly
            100                 105                 110

Pro Thr Gly Pro Glu Gly Pro Arg Gly Asn Ile Gly Pro Leu Gly Pro
        115                 120                 125

Thr Gly Leu Pro Gly Pro Met Gly Pro Ile Gly Lys Pro Gly Pro Lys
    130                 135                 140

Gly Glu Ala Gly Pro Thr Gly Pro Gln Gly Glu Pro Gly Val Gln Gly
145                 150                 155                 160

Ile Arg Gly Trp Lys Gly Asp Arg Gly Glu Lys Gly Lys Ile Gly Glu
                165                 170                 175

Thr Leu Val Leu Pro Lys Ser Ala Phe Thr Val Gly Leu Thr Val Leu
```

180 185 190

Ser Lys Phe Pro Ser Ser Asp Arg Pro Ile Lys Phe Asp Lys Ile His
195 200 205

Ile Thr Val Phe Ser Arg Asn Val Gln Val Ser Leu Val Lys Asn Gly
210 215 220

Val Lys Ile Leu His Thr Lys Asp Ala Tyr Met Ser Ser Glu Asp Gln
225 230 235 240

Ala Ser Gly Gly Ile Val Leu Gln Leu Lys Leu Gly Asp Glu Val Trp
245 250 255

Leu Gln Val Thr Gly Gly Glu Arg Phe Asn Gly Leu Phe Ala Asp Glu
260 265 270

Asp Asp Asp Thr Thr Phe Thr Gly Phe Leu Leu Phe Ser Ser Pro
275 280 285

<210> 275

<211> 22

<212> PRT

<213> Homo sapiens

<400> 275

Asp Gln Ala Ser Gly Gly Ile Val Leu Gln Leu Lys Leu Gly Asp Glu
1 5 10 15

Val Trp Leu Gln Val Thr
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<210> 276

<211> 20

<212> PRT

<213> Homo sapiens

<400> 276

Asp Gln Ala Ser Gly Gly Ile Val Leu Gln Leu Lys Leu Gly Asp Glu
1 5 10 15

Val Trp Leu Gln
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<210> 277

<211> 27

<212> PRT

<213> Homo sapiens

<400> 277

Gly Leu Pro Gly Pro Met Gly Pro Ile Gly Lys Pro Gly Pro Lys Gly
1 5 10 15

Glu Ala Gly Pro Thr Gly Pro Gln Gly Glu Pro
20 25

<210> 278

<211> 27

<212> PRT

<213> Homo sapiens

<400> 278

Gly Ile Pro Gly Asn Pro Gly His Asn Gly Leu Pro Gly Arg Asp Gly
1 5 10 15

Arg Asp Gly Ala Lys Gly Asp Lys Gly Asp Ala
20 25

<210> 279

<211> 29

<212> PRT

<213> Homo sapiens

<400> 279

Gly Arg Asp Gly Ala Lys Gly Asp Lys Gly Asp Ala Gly Glu Pro Gly
1 5 10 15

Arg Pro Gly Ser Pro Gly Lys Asp Gly Thr Ser Gly Glu
20 25

<210> 280

<211> 29

<212> PRT

<213> Homo sapiens

<400> 280

Gly Ile Pro Gly Asn Pro Gly His Asn Gly Leu Pro Gly Arg Asp Gly
1 5 10 15

Arg Asp Gly Ala Lys Gly Asp Lys Gly Asp Ala Gly Glu
20 25

<210> 281

<211> 29

<212> PRT

<213> Homo sapiens

<400> 281

Gly Asp Gln Gly Ser Arg Gly Ser Pro Gly Lys His Gly Pro Lys Gly
1 5 10 15

Leu Ala Gly Pro Met Gly Glu Lys Gly Leu Arg Gly Glu
20 25

<210> 282

<211> 27

<212> PRT

<213> Homo sapiens

<400> 282

Gly His Pro Gly Ile Pro Gly Asn Pro Gly His Asn Gly Leu Pro Gly
1 5 10 15

Arg Asp Gly Arg Asp Gly Ala Lys Gly Asp Lys
20 25

<210> 283

<211> 27

<212> PRT

<213> Homo sapiens

<400> 283

Gly Leu Pro Gly Arg Asp Gly Arg Asp Gly Ala Lys Gly Asp Lys Gly
1 5 10 15

Asp Ala Gly Glu Pro Gly Arg Pro Gly Ser Pro
20 25

<210> 284

<211> 27

<212> PRT

<213> Homo sapiens

<400> 284

Gly Lys Pro Gly Pro Lys Gly Glu Ala Gly Pro Thr Gly Pro Gln Gly
1 5 10 15

Glu Pro Gly Val Gln Gly Ile Arg Gly Trp Lys
20 25

<210> 285

<211> 27

<212> PRT

<213> Homo sapiens

<400> 285

Gly Asn Pro Gly His Asn Gly Leu Pro Gly Arg Asp Gly Arg Asp Gly
1 5 10 15

Ala Lys Gly Asp Lys Gly Asp Ala Gly Glu Pro
20 25

<210> 286

<211> 29

<212> PRT

<213> Homo sapiens

<400> 286

Gly His Pro Gly Ile Pro Gly Asn Pro Gly His Asn Gly Leu Pro Gly
1 5 10 15

Arg Asp Gly Arg Asp Gly Ala Lys Gly Asp Lys Gly Asp
20 25

<210> 287

<211> 27

<212> PRT

<213> Homo sapiens

<400> 287

Gly Asp Lys Gly Asp Ala Gly Glu Pro Gly Arg Pro Gly Ser Pro Gly
1 5 10 15

Lys Asp Gly Thr Ser Gly Glu Lys Gly Glu Arg
20 25

<210> 288

<211> 29

<212> PRT

<213> Homo sapiens

<400> 288

Gly Ala Lys Gly Asp Lys Gly Asp Ala Gly Glu Pro Gly Arg Pro Gly
1 5 10 15

Ser Pro Gly Lys Asp Gly Thr Ser Gly Glu Lys Gly Glu
20 25

<210> 289

<211> 29

<212> PRT

<213> Homo sapiens

<400> 289

Gly Pro Lys Gly Glu Ala Gly Pro Thr Gly Pro Gln Gly Glu Pro Gly
1 5 10 15

Val Gln Gly Ile Arg Gly Trp Lys Gly Asp Arg Gly Glu
20 25

<210> 290

<211> 29

<212> PRT

<213> Homo sapiens

<400> 290

Gly Asp Lys Gly Asp Ala Gly Glu Pro Gly Arg Pro Gly Ser Pro Gly
1 5 10 15

Lys Asp Gly Thr Ser Gly Glu Lys Gly Glu Arg Gly Ala
20 25

<210> 291

<211> 29

<212> PRT

<213> Homo sapiens

<400> 291

Gly Pro Glu Gly Pro Arg Gly Asn Ile Gly Pro Leu Gly Pro Thr Gly
1 5 10 15

Leu Pro Gly Pro Met Gly Pro Ile Gly Lys Pro Gly Pro
20 25

<210> 292

<211> 11

<212> PRT

<213> Homo sapiens

<400> 292

Asp Asp Thr Thr Phe Thr Gly Phe Leu Leu Phe
1 5 10

<210> 293

<211> 27

<212> PRT

<213> Homo sapiens

<400> 293

Gly Pro Ile Gly Lys Pro Gly Pro Lys Gly Glu Ala Gly Pro Thr Gly
1 5 10 15

Pro Gln Gly Glu Pro Gly Val Gln Gly Ile Arg
20 25

<210> 294

<211> 10

<212> PRT

<213> Homo sapiens

<400> 294

Thr Thr Phe Thr Gly Phe Leu Leu Phe Ser
1 5 10

<210> 295

<211> 27

<212> PRT

<213> Homo sapiens

<400> 295

Gly Ala Lys Gly Asp Lys Gly Asp Ala Gly Glu Pro Gly Arg Pro Gly
1 5 10 15

Ser Pro Gly Lys Asp Gly Thr Ser Gly Glu Lys
20 25

<210> 296

<211> 27

<212> PRT

<213> Homo sapiens

<400> 296

Gly Ser Pro Gly Lys Asp Gly Thr Ser Gly Glu Lys Gly Glu Arg Gly
1 5 10 15

Ala Asp Gly Lys Val Glu Ala Lys Gly Ile Lys

20 25

<210> 297

<211> 27

<212> PRT

<213> Homo sapiens

<400> 297

Cys Arg Gln Gly His Pro Gly Ile Pro Gly Asn Pro Gly His Asn Gly
1 5 10 15

Leu Pro Gly Arg Asp Gly Arg Asp Gly Ala Lys
20 25

<210> 298

<211> 29

<212> PRT

<213> Homo sapiens

<400> 298

Gly Pro Arg Gly Asn Ile Gly Pro Leu Gly Pro Thr Gly Leu Pro Gly
1 5 10 15

Pro Met Gly Pro Ile Gly Lys Pro Gly Pro Lys Gly Glu
20 25

<210> 299

<211> 245

<212> PRT

<213> Homo sapiens

<400> 299

Ala Ser Phe Leu Leu Gln Met Cys Pro Gly Pro Val Gln Ser Leu Ser
1 5 10 15

Replacement Sheet

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Ser Glu Pro Gly Ser Gly Gly Phe Cys Leu Pro Leu Lys Ser Ala Gln
            20                  25                  30

Gly Thr Thr Pro Gln Asp Thr Cys Arg Gln Gly His Pro Gly Ile Pro
        35                  40                  45

Gly Asn Pro Gly His Asn Gly Leu Pro Gly Arg Asp Gly Arg Asp Gly
    50                  55                  60

Ala Lys Gly Asp Lys Gly Asp Ala Gly Glu Pro Gly Arg Pro Gly Ser
65                  70                  75                  80

Pro Gly Lys Asp Gly Thr Ser Gly Glu Lys Gly Glu Arg Gly Ala Asp
                85                  90                  95

Gly Lys Val Glu Ala Lys Gly Ile Lys Gly Asp Gln Gly Ser Gly Ser
            100                 105                 110

Pro Gly Lys His Gly Pro Lys Gly Leu Ala Gly Pro Met Gly Glu Lys
        115                 120                 125

Gly Leu Arg Gly Glu Thr Gly Pro Gln Gly Gln Lys Gly Asn Lys Gly
    130                 135                 140

Asp Val Gly Pro Thr Gly Pro Glu Gly Pro Arg Gly Asn Ile Gly Pro
145                 150                 155                 160

Leu Gly Pro Thr Gly Leu Pro Gly Pro Met Gly Pro Ile Gly Lys Pro
                165                 170                 175

Gly Pro Lys Gly Glu Ala Gly Pro Thr Gly Pro Gln Gly Glu Pro Gly
            180                 185                 190

Val Arg Gly Ile Arg Gly Trp Lys Gly Asp Arg Gly Glu Lys Gly Lys
        195                 200                 205

Ile Gly Glu Thr Leu Val Leu Pro Lys Ser Ala Phe Thr Val Gly Leu
    210                 215                 220

Thr Val Leu Ser Lys Phe Pro Ser Ser Asp Val Pro Ile Lys Phe Asp
225                 230                 235                 240
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Lys Ile His Ile Thr
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<210> 300

<211> 422

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)..(422)

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caatttttta tattcaaatc tacgacattg aattagggct tctatatata tgatactttg 120

gtgtactgtg atcttgctgc ttttatccat atgtcagctt tggttcttgt gagtttacct 180

gcttattatg atacttggag tccattcata gtgtggggaa gaatgatttt tgccctgcag 240

gagaaggtct aattgaaata atgctgcttg tccccaaaga aattgtttgc cttgtactct 300

tgttaacctt agagctagac ctgggaatga ttcaacttca agccttaacc tggaattttc 360

tggatttgag ggaattccca agcctatgat ctttttcaca ttttcttttt cttatatgaa 420

at 422

<210> 301

<211> 1848

<212> DNA

<213> Homo sapiens

<220>

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<222> (199)..(1215)

<223>

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aatatttgtc tgcctggtga gagcccagcg tagggctgtg ctgtccgtag atactcaata    120

ctgattaatg gatggccgtg catgtctgtg tgggagtcgt gtgcttagga tctgctcagc    180

tctccgaaag caacagaa atg gtg tgg gga aga aga aaa tca cag gat tgt       231
                       Met Val Trp Gly Arg Arg Lys Ser Gln Asp Cys
                       1               5                   10

gat cca acc atg atc acg gct ttc tgg att gga ctt cat ctt ctg gag       279
Asp Pro Thr Met Ile Thr Ala Phe Trp Ile Gly Leu His Leu Leu Glu
            15                  20                  25

ggt cca caa ggt cca gtg ctg gca gca aac ctc acc att ttg tcc tcc       327
Gly Pro Gln Gly Pro Val Leu Ala Ala Asn Leu Thr Ile Leu Ser Ser
        30                  35                  40

aaa agg aag gtg act ttt aag aag caa tcc aga aga ggt ccc cgc cca       375
Lys Arg Lys Val Thr Phe Lys Lys Gln Ser Arg Arg Gly Pro Arg Pro
    45                  50                  55

acc ttc aaa att ctg tcc aaa agc aga caa gag gat cgc ccc gcg ctg       423
Thr Phe Lys Ile Leu Ser Lys Ser Arg Gln Glu Asp Arg Pro Ala Leu
60                  65                  70                  75

agc cgg ctg gtg ggc agc agg agg cgc ctg atc gcc gcc ggg gcg ctg       471
Ser Arg Leu Val Gly Ser Arg Arg Arg Leu Ile Ala Ala Gly Ala Leu
                80                  85                  90

ggg gtg gtg atg gtg ctg ctg ctg gtg atc ctc atc ccg gtg ctg atg       519
Gly Val Val Met Val Leu Leu Leu Val Ile Leu Ile Pro Val Leu Met
            95                  100                 105

ctg ggc acc tgc cgc atg gtc tgc gac ccc tac ggg ggc acc aag gcg       567
Leu Gly Thr Cys Arg Met Val Cys Asp Pro Tyr Gly Gly Thr Lys Ala
        110                 115                 120

ccc agc acc gct gcc acg ccc gac cgc ggc ctc atg cag tcc ctg ccc       615
Pro Ser Thr Ala Ala Thr Pro Asp Arg Gly Leu Met Gln Ser Leu Pro
    125                 130                 135

acc ttc atc cag ggc ccc aaa ggc gag gcc ggc agg ccc ggg aag gcg       663
Thr Phe Ile Gln Gly Pro Lys Gly Glu Ala Gly Arg Pro Gly Lys Ala
140                 145                 150                 155

ggt ccg cgc ggg ccc ccc gga gag ccc ggg cca ccc ggc ccc atg ggg       711
Gly Pro Arg Gly Pro Pro Gly Glu Pro Gly Pro Pro Gly Pro Met Gly
                160                 165                 170
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ccc ccg ggc gag aag ggc gag ccg ggc cgc caa ggc ctg ccg ggc ccg      759
Pro Pro Gly Glu Lys Gly Glu Pro Gly Arg Gln Gly Leu Pro Gly Pro
            175                 180                 185

ccc ggg gcg ccc ggc ctg aac gcg gcc ggg gcc atc agc gcc gcc acc      807
Pro Gly Ala Pro Gly Leu Asn Ala Ala Gly Ala Ile Ser Ala Ala Thr
        190                 195                 200

tac agc acg ggg ccc aag atc gcc ttc tac gcc ggc ctc aag cgg cag      855
Tyr Ser Thr Gly Pro Lys Ile Ala Phe Tyr Ala Gly Leu Lys Arg Gln
    205                 210                 215

cat gaa ggc tac gag gtg ctc aag ttc gac gac gtg gtc acc aac ctc      903
His Glu Gly Tyr Glu Val Leu Lys Phe Asp Asp Val Val Thr Asn Leu
220                 225                 230                 235

gga aac cac tac gac ccc acc acc ggc aag ttc acc tgc tcc atc ccg      951
Gly Asn His Tyr Asp Pro Thr Thr Gly Lys Phe Thr Cys Ser Ile Pro
                240                 245                 250

ggc atc tac ttc ttc acc tac cac gtc ctg atg cgc gga ggg gac ggc      999
Gly Ile Tyr Phe Phe Thr Tyr His Val Leu Met Arg Gly Gly Asp Gly
            255                 260                 265

acc agc atg tgg gct gat ctc tgc aaa aac aac cag gtg cgt gct agt     1047
Thr Ser Met Trp Ala Asp Leu Cys Lys Asn Asn Gln Val Arg Ala Ser
        270                 275                 280

gca att gcc caa gat gct gat cag aat tac gac tat gcc agt aac agt     1095
Ala Ile Ala Gln Asp Ala Asp Gln Asn Tyr Asp Tyr Ala Ser Asn Ser
    285                 290                 295

gtg gtt ctt cat ttg gag ccg gga gat gaa gtc tat atc aaa tta gat     1143
Val Val Leu His Leu Glu Pro Gly Asp Glu Val Tyr Ile Lys Leu Asp
300                 305                 310                 315

ggc ggg aaa gcc cat gga gga aac aac aac aaa tac agc acg ttt tct     1191
Gly Gly Lys Ala His Gly Gly Asn Asn Asn Lys Tyr Ser Thr Phe Ser
                320                 325                 330

gga ttt att att tat gct gac tga taatgcagaa actaagctta ttattctgag    1245
Gly Phe Ile Ile Tyr Ala Asp
            335

tttgaacact ggattcgtat ggctaacgtc agtgaatcaa ggatcccagg ggatgccaat   1305

ggcagggcac ctcagttgtg tatatgtggg gaaatcaaat gctacctgac tcacatctgt   1365

atcactcaga aacattatgt aaaaaatatc aaagcaagat aagcagatgt gtgatccact   1425

accgccaaag caaatactcc ttatcgttag tgtccatgtg aatgaagtcc tatatagatc   1485

acaaattttt atagacaaat ctaagacatt gaattatttc ttctatatat atgatacttt   1545

ggtgtactgt gatcttgctg cttttatcca tatgtcagct ttggttcttg tgagtttacc   1605

tgcttattat gatacttgga gtccattcat agtgtgggga agaatgattt ttgccctgca   1665
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ggagaaggtc taattgaaat aatgctgctt gtccccaaag aaattgtttg ccttgtactc 1725

ttgttaacct tagagctaga cctgggaatg attcaacttc aagccttaac ctggaatttt 1785

ctggatttga gggaattccc aagcctatga tctttttcac attttctttt tcttatatga 1845

aat 1848

<210> 302

<211> 338

<212> PRT

<213> Homo sapiens

<400> 302

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Met Val Trp Gly Arg Arg Lys Ser Gln Asp Cys Asp Pro Thr Met Ile
1               5                   10                  15

Thr Ala Phe Trp Ile Gly Leu His Leu Leu Glu Gly Pro Gln Gly Pro
            20                  25                  30

Val Leu Ala Ala Asn Leu Thr Ile Leu Ser Ser Lys Arg Lys Val Thr
        35                  40                  45

Phe Lys Lys Gln Ser Arg Arg Gly Pro Arg Pro Thr Phe Lys Ile Leu
    50                  55                  60

Ser Lys Ser Arg Gln Glu Asp Arg Pro Ala Leu Ser Arg Leu Val Gly
65                  70                  75                  80

Ser Arg Arg Arg Leu Ile Ala Ala Gly Ala Leu Gly Val Val Met Val
                85                  90                  95

Leu Leu Leu Val Ile Leu Ile Pro Val Leu Met Leu Gly Thr Cys Arg
            100                 105                 110

Met Val Cys Asp Pro Tyr Gly Gly Thr Lys Ala Pro Ser Thr Ala Ala
        115                 120                 125

Thr Pro Asp Arg Gly Leu Met Gln Ser Leu Pro Thr Phe Ile Gln Gly
    130                 135                 140
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Pro Lys Gly Glu Ala Gly Arg Pro Gly Lys Ala Gly Pro Arg Gly Pro
145 150 155 160

Pro Gly Glu Pro Gly Pro Pro Gly Pro Met Gly Pro Pro Gly Glu Lys
165 170 175

Gly Glu Pro Gly Arg Gln Gly Leu Pro Gly Pro Pro Gly Ala Pro Gly
180 185 190

Leu Asn Ala Ala Gly Ala Ile Ser Ala Ala Thr Tyr Ser Thr Gly Pro
195 200 205

Lys Ile Ala Phe Tyr Ala Gly Leu Lys Arg Gln His Glu Gly Tyr Glu
210 215 220

Val Leu Lys Phe Asp Asp Val Val Thr Asn Leu Gly Asn His Tyr Asp
225 230 235 240

Pro Thr Thr Gly Lys Phe Thr Cys Ser Ile Pro Gly Ile Tyr Phe Phe
245 250 255

Thr Tyr His Val Leu Met Arg Gly Gly Asp Gly Thr Ser Met Trp Ala
260 265 270

Asp Leu Cys Lys Asn Asn Gln Val Arg Ala Ser Ala Ile Ala Gln Asp
275 280 285

Ala Asp Gln Asn Tyr Asp Tyr Ala Ser Asn Ser Val Val Leu His Leu
290 295 300

Glu Pro Gly Asp Glu Val Tyr Ile Lys Leu Asp Gly Gly Lys Ala His
305 310 315 320

Gly Gly Asn Asn Asn Lys Tyr Ser Thr Phe Ser Gly Phe Ile Ile Tyr
325 330 335

Ala Asp

<210> 303

<211> 1017

<212> DNA

<213> Homo sapiens

<400> 303
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attggacttc atcttctgga gggtccacaa ggtccagtgc tggcagcaaa cctcaccatt 120

ttgtcctcca aaaggaaggt gacttttaag aagcaatcca gaagaggtcc ccgcccaacc 180

ttcaaaattc tgtccaaaag cagacaagag gatcgccccg cgctgagccg gctggtgggc 240

agcaggaggc gcctgatcgc cgccggggcg ctgggggtgg tgatggtgct gctgctggtg 300

atcctcatcc cggtgctgat gctgggcacc tgccgcatgg tctgcgaccc ctacgggggc 360

accaaggcgc ccagcaccgc tgccacgccc gaccgcggcc tcatgcagtc cctgcccacc 420

ttcatccagg gccccaaagg cgaggccggc aggcccggga aggcgggtcc gcgcgggccc 480

cccggagagc ccgggccacc cggccccatg gggcccccgg gcgagaaggg cgagccgggc 540

cgccaaggcc tgccgggccc gcccggggcg cccggcctga acgcggccgg ggccatcagc 600

gccgccacct acagcacggg gcccaagatc gccttctacg ccggcctcaa gcggcagcat 660

gaaggctacg aggtgctcaa gttcgacgac gtggtcacca acctcggaaa ccactacgac 720

cccaccaccg gcaagttcac ctgctccatc ccgggcatct acttcttcac ctaccacgtc 780

ctgatgcgcg gaggggacgg caccagcatg tgggctgatc tctgcaaaaa caaccaggtg 840

cgtgctagtg caattgccca agatgctgat cagaattacg actatgccag taacagtgtg 900

gttcttcatt tggagccggg agatgaagtc tatatcaaat tagatggcgg gaaagcccat 960

ggaggaaaca acaacaaata cagcacgttt tctggattta ttatttatgc tgactga 1017

<210> 304

<211> 36

<212> PRT

<213> Homo sapiens

<400> 304

Val Leu Lys Phe Asp Asp Val Val Thr Asn Leu Gly Asn His Tyr Asp
1 5 10 15

Pro Thr Thr Gly Lys Phe Thr Cys Ser Ile Pro Gly Ile Tyr Phe Phe
20 25 30

Thr Tyr His Val
35

<210> 305

<211> 20

<212> PRT

<213> Homo sapiens

<400> 305

Phe Thr Cys Ser Ile Pro Gly Ile Tyr Phe Phe Thr Tyr His Val Leu
1 5 10 15

Met Arg Gly Gly
20

<210> 306

<211> 22

<212> PRT

<213> Homo sapiens

<400> 306

Asp Tyr Ala Ser Asn Ser Val Val Leu His Leu Glu Pro Gly Asp Glu
1 5 10 15

Val Tyr Ile Lys Leu Asp
20

<210> 307

<211> 27

<212> PRT

<213> Homo sapiens

<400> 307

Gly Glu Pro Gly Pro Pro Gly Pro Met Gly Pro Pro Gly Glu Lys Gly
1 5 10 15

Glu Pro Gly Arg Gln Gly Leu Pro Gly Pro Pro
20 25

<210> 308

<211> 20

<212> PRT

<213> Homo sapiens

<400> 308

Asp Tyr Ala Ser Asn Ser Val Val Leu His Leu Glu Pro Gly Asp Glu
1 5 10 15

Val Tyr Ile Lys
20

<210> 309

<211> 27

<212> PRT

<213> Homo sapiens

<400> 309

Gly Lys Ala Gly Pro Arg Gly Pro Pro Gly Glu Pro Gly Pro Pro Gly
1 5 10 15

Pro Met Gly Pro Pro Gly Glu Lys Gly Glu Pro
20 25

<210> 310

<211> 27

<212> PRT

<213> Homo sapiens

<400> 310

Gly Arg Pro Gly Lys Ala Gly Pro Arg Gly Pro Pro Gly Glu Pro Gly
1 5 10 15

Pro Pro Gly Pro Met Gly Pro Pro Gly Glu Lys
20 25

<210> 311

<211> 27

<212> PRT

<213> Homo sapiens

<400> 311

Gly Pro Pro Gly Glu Pro Gly Pro Pro Gly Pro Met Gly Pro Pro Gly
1 5 10 15

Glu Lys Gly Glu Pro Gly Arg Gln Gly Leu Pro
20 25

<210> 312

<211> 29

<212> PRT

<213> Homo sapiens

<400> 312

Gly Arg Pro Gly Lys Ala Gly Pro Arg Gly Pro Pro Gly Glu Pro Gly
1 5 10 15

Pro Pro Gly Pro Met Gly Pro Pro Gly Glu Lys Gly Glu
20 25

<210> 313

<211> 27

<212> PRT

<213> Homo sapiens

<400> 313

Gly Pro Pro Gly Pro Met Gly Pro Pro Gly Glu Lys Gly Glu Pro Gly
1 5 10 15

Arg Gln Gly Leu Pro Gly Pro Pro Gly Ala Pro
20 25

<210> 314

<211> 27

<212> PRT

<213> Homo sapiens

<400> 314

Gln His Glu Gly Tyr Glu Val Leu Lys Phe Asp Asp Val Val Thr Asn
1 5 10 15

Leu Gly Asn His Tyr Asp Pro Thr Thr Gly Lys
20 25

<210> 315

<211> 27

<212> PRT

<213> Homo sapiens

<400> 315

Gly Pro Met Gly Pro Pro Gly Glu Lys Gly Glu Pro Gly Arg Gln Gly
1 5 10 15

Leu Pro Gly Pro Pro Gly Ala Pro Gly Leu Asn
20 25

<210> 316

<211> 27

<212> PRT

<213> Homo sapiens

<400> 316

Gly Pro Arg Gly Pro Pro Gly Glu Pro Gly Pro Pro Gly Pro Met Gly
1 5 10 15

Pro Pro Gly Glu Lys Gly Glu Pro Gly Arg Gln
20 25

<210> 317

<211> 29

<212> PRT

<213> Homo sapiens

<400> 317

Gly Glu Ala Gly Arg Pro Gly Lys Ala Gly Pro Arg Gly Pro Pro Gly
1 5 10 15

Glu Pro Gly Pro Pro Gly Pro Met Gly Pro Pro Gly Glu
20 25

<210> 318

<211> 29

<212> PRT

<213> Homo sapiens

<400> 318

Gly Pro Pro Gly Pro Met Gly Pro Pro Gly Glu Lys Gly Glu Pro Gly
1 5 10 15

Arg Gln Gly Leu Pro Gly Pro Pro Gly Ala Pro Gly Leu
20 25

<210> 319

<211> 44

<212> PRT

<213> Homo sapiens

<400> 319

Pro Arg Gly Pro Pro Gly Glu Pro Gly Pro Pro Gly Pro Met Gly Pro
1 5 10 15

Pro Gly Glu Lys Gly Glu Pro Gly Arg Gln Gly Leu Pro Gly Pro Pro
20 25 30

Gly Ala Pro Gly Leu Asn Ala Ala Gly Ala Ile Ser
35 40

<210> 320

<211> 27

<212> PRT

<213> Homo sapiens

<400> 320

Gly Glu Ala Gly Arg Pro Gly Lys Ala Gly Pro Arg Gly Pro Pro Gly
1 5 10 15

Glu Pro Gly Pro Pro Gly Pro Met Gly Pro Pro
20 25

<210> 321

<211> 29

<212> PRT

<213> Homo sapiens

Replaced sequence

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Pro Pro Gly Ala Pro Gly Leu Asn Ala Ala Gly Ala Ile
20 25

<210> 322

<211> 1528

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (161)..(895)

<223>

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caaaattctg tccaaaagca gacaagagga tcgccccgcg ctgagccggc tggtgggcag 120

caggaggcgc ctgatcgccg ccggggcgct gggggtggtg atg gtg ctg ctg ctg 175
Met Val Leu Leu Leu
1 5

gtg atc ctc atc ccg gtg ctg atg ctg ggc acc tgc cgc atg gtc tgc 223
Val Ile Leu Ile Pro Val Leu Met Leu Gly Thr Cys Arg Met Val Cys
10 15 20

gac ccc tac ggg ggc acc aag gcg ccc agc acc gct gcc acg ccc gac 271
Asp Pro Tyr Gly Gly Thr Lys Ala Pro Ser Thr Ala Ala Thr Pro Asp
25 30 35

cgc ggc ctc atg cag tcc ctg ccc acc ttc atc cag ggc ccc aaa ggc 319
Arg Gly Leu Met Gln Ser Leu Pro Thr Phe Ile Gln Gly Pro Lys Gly
40 45 50

gag gcc ggc agg ccc ggg aag gcg ggt ccg cgc ggg ccc ccc gga gag 367
Glu Ala Gly Arg Pro Gly Lys Ala Gly Pro Arg Gly Pro Pro Gly Glu
55 60 65

ccc ggg cca ccc ggc ccc atg ggg ccc ccg ggc gag aag ggc gag ccg 415

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Pro Gly Pro Pro Gly Pro Met Gly Pro Pro Gly Glu Lys Gly Glu Pro
70                  75                  80                  85

ggc cgc caa ggc ctg ccg ggc ccg ccc ggg gcg ccc ggc ctg aac gcg      463
Gly Arg Gln Gly Leu Pro Gly Pro Pro Gly Ala Pro Gly Leu Asn Ala
                90                  95                  100

gcc ggg gcc atc agc gcc gcc acc tac agc acg ggg ccc aag atc gcc      511
Ala Gly Ala Ile Ser Ala Ala Thr Tyr Ser Thr Gly Pro Lys Ile Ala
            105                 110                 115

ttc tac gcc ggc ctc aag cgg cag cat gaa ggc tac gag gtg ctc aag      559
Phe Tyr Ala Gly Leu Lys Arg Gln His Glu Gly Tyr Glu Val Leu Lys
        120                 125                 130

ttc gac gac gtg gtc acc aac ctc gga aac cac tac gac ccc acc acc      607
Phe Asp Asp Val Val Thr Asn Leu Gly Asn His Tyr Asp Pro Thr Thr
    135                 140                 145

ggc aag ttc acc tgc tcc atc ccg ggc atc tac ttc ttc acc tac cac      655
Gly Lys Phe Thr Cys Ser Ile Pro Gly Ile Tyr Phe Phe Thr Tyr His
150                 155                 160                 165

gtc ctg atg cgc gga ggg gac ggc acc agc atg tgg gct gat ctc tgc      703
Val Leu Met Arg Gly Gly Asp Gly Thr Ser Met Trp Ala Asp Leu Cys
                170                 175                 180

aaa aac aac cag gtg cgt gct agt gca att gcc caa gat gct gat cag      751
Lys Asn Asn Gln Val Arg Ala Ser Ala Ile Ala Gln Asp Ala Asp Gln
            185                 190                 195

aat tac gac tat gcc agt aac agt gtg gtt ctt cat ttg gag ccg gga      799
Asn Tyr Asp Tyr Ala Ser Asn Ser Val Val Leu His Leu Glu Pro Gly
        200                 205                 210

gat gaa gtc tat atc aaa tta gat ggc ggg aaa gcc cat gga gga aac      847
Asp Glu Val Tyr Ile Lys Leu Asp Gly Gly Lys Ala His Gly Gly Asn
    215                 220                 225

aac aac aaa tac agc acg ttt tct gga ttt att att tat gct gac tga      895
Asn Asn Lys Tyr Ser Thr Phe Ser Gly Phe Ile Ile Tyr Ala Asp
230                 235                 240

taatgcagaa actaagctta ttattctgag tttgaacact ggattcgtat ggctaacgtc    955

agtgaatcaa ggatcccagg ggatgccaat ggcagggcac ctcagttgtg tatatgtggg   1015

gaaatcaaat gctacctgac tcacatctgt atcactcaga aacattatgt aaaaaatatc   1075

aaagcaagat aagcagatgt gtgatccact accgccaaag caaatactcc ttatcgttag   1135

tgtccatgtg aatgaagtcc tatatagatc acaaattttt atagacaaat ctaagacatt   1195

gaattatttc ttctatatat atgatacttt ggtgtactgt gatcttgctg cttttatcca   1255

tatgtcagct ttggttcttg tgagtttacc tgcttattat gatacttgga gtccattcat   1315
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agtgtgggga agaatgattt ttgccctgca ggagaaggtc taattgaaat aatgctgctt 1375

gtccccaaag aaattgtttg ccttgtactc ttgttaacct tagagctaga cctgggaatg 1435

attcaacttc aagccttaac ctggaatttt ctggatttga gggaattccc aagcctatga 1495

tctttttcac attttctttt tcttatatga aat 1528

<210> 323

<211> 244

<212> PRT

<213> Homo sapiens

Replacement Sheet

<400> 323

Met Val Leu Leu Leu Val Ile Leu Ile Pro Val Leu Met Leu Gly Thr
1 5 10 15

Cys Arg Met Val Cys Asp Pro Tyr Gly Gly Thr Lys Ala Pro Ser Thr
20 25 30

Ala Ala Thr Pro Asp Arg Gly Leu Met Gln Ser Leu Pro Thr Phe Ile
35 40 45

Gln Gly Pro Lys Gly Glu Ala Gly Arg Pro Gly Lys Ala Gly Pro Arg
50 55 60

Gly Pro Pro Gly Glu Pro Gly Pro Pro Gly Pro Met Gly Pro Pro Gly
65 70 75 80

Glu Lys Gly Glu Pro Gly Arg Gln Gly Leu Pro Gly Pro Pro Gly Ala
85 90 95

Pro Gly Leu Asn Ala Ala Gly Ala Ile Ser Ala Ala Thr Tyr Ser Thr
100 105 110

Gly Pro Lys Ile Ala Phe Tyr Ala Gly Leu Lys Arg Gln His Glu Gly
115 120 125

Tyr Glu Val Leu Lys Phe Asp Asp Val Val Thr Asn Leu Gly Asn His
130 135 140

Tyr Asp Pro Thr Thr Gly Lys Phe Thr Cys Ser Ile Pro Gly Ile Tyr
145 150 155 160

Phe Phe Thr Tyr His Val Leu Met Arg Gly Gly Asp Gly Thr Ser Met
165 170 175

Trp Ala Asp Leu Cys Lys Asn Asn Gln Val Arg Ala Ser Ala Ile Ala
180 185 190

Gln Asp Ala Asp Gln Asn Tyr Asp Tyr Ala Ser Asn Ser Val Val Leu
195 200 205

His Leu Glu Pro Gly Asp Glu Val Tyr Ile Lys Leu Asp Gly Gly Lys
210 215 220

Ala His Gly Gly Asn Asn Asn Lys Tyr Ser Thr Phe Ser Gly Phe Ile
225 230 235 240

Ile Tyr Ala Asp

<210> 324

<211> 735

<212> DNA

<213> Homo sapiens

<400> 324
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tgcgacccct acgggggcac caaggcgccc agcaccgctg ccacgcccga ccgcggcctc 120

atgcagtccc tgcccacctt catccagggc cccaaaggcg aggccggcag gcccgggaag 180

gcgggtccgc gcgggccccc cggagagccc gggccacccg gccccatggg gcccccgggc 240

gagaagggcg agccgggccg ccaaggcctg ccgggcccgc ccggggcgcc cggcctgaac 300

gcggccgggg ccatcagcgc cgccacctac agcacggggc ccaagatcgc cttctacgcc 360

ggcctcaagc ggcagcatga aggctacgag gtgctcaagt tcgacgacgt ggtcaccaac 420

ctcggaaacc actacgaccc caccaccggc aagttcacct gctccatccc gggcatctac 480

ttcttcacct accacgtcct gatgcgcgga ggggacggca ccagcatgtg ggctgatctc 540

tgcaaaaaca accaggtgcg tgctagtgca attgcccaag atgctgatca gaattacgac 600

tatgccagta acagtgtggt tcttcatttg gagccgggag atgaagtcta tatcaaatta 660

gatggcggga aagcccatgg aggaaacaac aacaaataca gcacgttttc tggatttatt 720

atttatgctg actga 735

<210> 325

<211> 19

<212> PRT

<213> Homo sapiens

<400> 325

Met Val Leu Leu Leu Val Ile Leu Ile Pro Val Leu Met Leu Gly Thr
1 5 10 15

Cys Arg Met

<210> 326

<211> 225

<212> PRT

<213> Homo sapiens

<400> 326

Val Cys Asp Pro Tyr Gly Gly Thr Lys Ala Pro Ser Thr Ala Ala Thr
1 5 10 15

Pro Asp Arg Gly Leu Met Gln Ser Leu Pro Thr Phe Ile Gln Gly Pro
20 25 30

Lys Gly Glu Ala Gly Arg Pro Gly Lys Ala Gly Pro Arg Gly Pro Pro
35 40 45

Gly Glu Pro Gly Pro Pro Gly Pro Met Gly Pro Pro Gly Glu Lys Gly
50 55 60

Glu Pro Gly Arg Gln Gly Leu Pro Gly Pro Pro Gly Ala Pro Gly Leu
65 70 75 80

Asn Ala Ala Gly Ala Ile Ser Ala Ala Thr Tyr Ser Thr Gly Pro Lys
85 90 95

Ile Ala Phe Tyr Ala Gly Leu Lys Arg Gln His Glu Gly Tyr Glu Val
100 105 110

Leu Lys Phe Asp Asp Val Val Thr Asn Leu Gly Asn His Tyr Asp Pro
115 120 125

Thr Thr Gly Lys Phe Thr Cys Ser Ile Pro Gly Ile Tyr Phe Phe Thr
130 135 140

Tyr His Val Leu Met Arg Gly Gly Asp Gly Thr Ser Met Trp Ala Asp
145 150 155 160

Leu Cys Lys Asn Asn Gln Val Arg Ala Ser Ala Ile Ala Gln Asp Ala
165 170 175

Asp Gln Asn Tyr Asp Tyr Ala Ser Asn Ser Val Val Leu His Leu Glu
180 185 190

Pro Gly Asp Glu Val Tyr Ile Lys Leu Asp Gly Gly Lys Ala His Gly
195 200 205

Gly Asn Asn Asn Lys Tyr Ser Thr Phe Ser Gly Phe Ile Ile Tyr Ala
210 215 220

Asp
225

<210> 327

<211> 36

<212> PRT

<213> Homo sapiens

<400> 327

Val Leu Lys Phe Asp Asp Val Val Thr Asn Leu Gly Asn His Tyr Asp

1 5 10 15

Pro Thr Thr Gly Lys Phe Thr Cys Ser Ile Pro Gly Ile Tyr Phe Phe
20 25 30

Thr Tyr His Val
35

<210> 328

<211> 20

<212> PRT

<213> Homo sapiens

<400> 328

Phe Thr Cys Ser Ile Pro Gly Ile Tyr Phe Phe Thr Tyr His Val Leu
1 5 10 15

Met Arg Gly Gly
20

<210> 329

<211> 22

<212> PRT

<213> Homo sapiens

<400> 329

Asp Tyr Ala Ser Asn Ser Val Val Leu His Leu Glu Pro Gly Asp Glu
1 5 10 15

Val Tyr Ile Lys Leu Asp
20

<210> 330

<211> 27

<212> PRT

<213> Homo sapiens

<400> 330

Gly Glu Pro Gly Pro Pro Gly Pro Met Gly Pro Pro Gly Glu Lys Gly
1 5 10 15

Glu Pro Gly Arg Gln Gly Leu Pro Gly Pro Pro
20 25

<210> 331

<211> 20

<212> PRT

<213> Homo sapiens

<400> 331

Asp Tyr Ala Ser Asn Ser Val Val Leu His Leu Glu Pro Gly Asp Glu
1 5 10 15

Val Tyr Ile Lys
20

<210> 332

<211> 27

<212> PRT

<213> Homo sapiens

<400> 332

Gly Lys Ala Gly Pro Arg Gly Pro Pro Gly Glu Pro Gly Pro Pro Gly
1 5 10 15

Pro Met Gly Pro Pro Gly Glu Lys Gly Glu Pro
20 25

<210> 333

<211> 27

<212> PRT

<213> Homo sapiens

<400> 333

Gly Arg Pro Gly Lys Ala Gly Pro Arg Gly Pro Pro Gly Glu Pro Gly
1 5 10 15

Pro Pro Gly Pro Met Gly Pro Pro Gly Glu Lys
20 25

<210> 334

<211> 27

<212> PRT

<213> Homo sapiens

<400> 334

Gly Pro Pro Gly Glu Pro Gly Pro Pro Gly Pro Met Gly Pro Pro Gly
1 5 10 15

Glu Lys Gly Glu Pro Gly Arg Gln Gly Leu Pro
20 25

<210> 335

<211> 29

<212> PRT

<213> Homo sapiens

<400> 335

Gly Arg Pro Gly Lys Ala Gly Pro Arg Gly Pro Pro Gly Glu Pro Gly
1 5 10 15

Pro Pro Gly Pro Met Gly Pro Pro Gly Glu Lys Gly Glu
20 25

Replacement Sheet

<210> 336

<211> 27

<212> PRT

<213> Homo sapiens

<400> 336

Gly Pro Pro Gly Pro Met Gly Pro Pro Gly Glu Lys Gly Glu Pro Gly
1 5 10 15

Arg Gln Gly Leu Pro Gly Pro Pro Gly Ala Pro
20 25

<210> 337

<211> 27

<212> PRT

<213> Homo sapiens

<400> 337

Gln His Glu Gly Tyr Glu Val Leu Lys Phe Asp Asp Val Val Thr Asn
1 5 10 15

Leu Gly Asn His Tyr Asp Pro Thr Thr Gly Lys
20 25

<210> 338

<211> 27

<212> PRT

<213> Homo sapiens

<400> 338

Gly Pro Met Gly Pro Pro Gly Glu Lys Gly Glu Pro Gly Arg Gln Gly
1 5 10 15

Leu Pro Gly Pro Pro Gly Ala Pro Gly Leu Asn

20 25

<210> 339

<211> 27

<212> PRT

<213> Homo sapiens

<400> 339

Gly Pro Arg Gly Pro Pro Gly Glu Pro Gly Pro Pro Gly Pro Met Gly
1 5 10 15

Pro Pro Gly Glu Lys Gly Glu Pro Gly Arg Gln
20 25

<210> 340

<211> 29

<212> PRT

<213> Homo sapiens

<400> 340

Gly Glu Ala Gly Arg Pro Gly Lys Ala Gly Pro Arg Gly Pro Pro Gly
1 5 10 15

Glu Pro Gly Pro Pro Gly Pro Met Gly Pro Pro Gly Glu
20 25

<210> 341

<211> 29

<212> PRT

<213> Homo sapiens

<400> 341

Gly Pro Pro Gly Pro Met Gly Pro Pro Gly Glu Lys Gly Glu Pro Gly
1 5 10 15

Arg Gln Gly Leu Pro Gly Pro Pro Gly Ala Pro Gly Leu
20 25

<210> 342

<211> 44

<212> PRT

<213> Homo sapiens

<400> 342

Pro Arg Gly Pro Pro Gly Glu Pro Gly Pro Pro Gly Pro Met Gly Pro
1 5 10 15

Pro Gly Glu Lys Gly Glu Pro Gly Arg Gln Gly Leu Pro Gly Pro Pro
20 25 30

Gly Ala Pro Gly Leu Asn Ala Ala Gly Ala Ile Ser
35 40

<210> 343

<211> 27

<212> PRT

<213> Homo sapiens

<400> 343

Gly Glu Ala Gly Arg Pro Gly Lys Ala Gly Pro Arg Gly Pro Pro Gly
1 5 10 15

Glu Pro Gly Pro Pro Gly Pro Met Gly Pro Pro
20 25

<210> 344

<211> 29

<212> PRT

<213> Homo sapiens

<400> 344

Gly Pro Pro Gly Glu Lys Gly Glu Pro Gly Arg Gln Gly Leu Pro Gly
1 5 10 15

Pro Pro Gly Ala Pro Gly Leu Asn Ala Ala Gly Ala Ile
20 25

<210> 345

<211> 452

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)..(452)

<223> n = A, T, G, or C

<400> 345
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ctcacccccg agagagacgc ctacgtggaa gcagtgctgt cggtctccaa cgccagcgtg 120

gcccagctgc ataccgctgg gtacaggaga gagttcctgg aataccaccg ccctccagga 180

gctttgcata cctgcggggg cccgggggca ttccacctca tcgtgcacct gaaggcggga 240

gatgcagtca acgtcgtggt gactgggggc aagctggctc acacagactt tgatgaaatg 300

tactccacat ttagtggggt tttcttatat cctttccttt cccacctcta aggtggctgg 360

ggagatgtca ggggaaagat agatagttgt aaaaactcta aagctttaat atattcggtt 420

tgtatgtaat ggaagcacgg ngctagagtt tc 452

<210> 346

<211> 3122

<212> DNA

<213> Homo sapiens

<400> 346

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cgtccccggc gcataaggct tcgcgggcgc accaggatac ccgaagtcac ctcctgtagc      60
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tttccccagt gatgggggcg ttgtcctctt taacaaagtg ctggtgaacg acggggatgt     180
ttacaacccc agcaccgggg tcttcacggc tccttatgat gggcgctacc tgatcacggc     240
caccctcacc cccgagagag acgcctacgt ggaagcagtg ctgtcggtct ccaacgccag     300
cgtggcccag ctgcataccg ctgggtacag gagagagttc ctggaatacc accgccctcc     360
aggagctttg catacctgcg gggcccgggg ggcattccac ctcatcgtgc acctgaaggc     420
gggagatgca gtcaacgtcg tggtgactgg gggcaagctg gctcacacag actttgatga     480
aatgtactcc acatttagtg ggttttctt atatcctttc ctttcccacc tctaaggtgg     540
ctggggagat gtcaggggaa agatagatag ttgtaaaaac tctaaagctt taatatattc     600
ggtttgtatg taatggaagc acggggctag agtttccaca taggccccaa cataaaggcc     660
ttccctcgct gttgaggcca ccatgcctta ctgcatccag ccaggctgca gggagtgagg     720
cacacggtga acatggccac tgacttttct gccactctaa ctggacaact ggaagacttg     780
gaaaggcctc cacctgtatc tacactctga gggccctgga ctgggcctga gcttgccaca     840
gaggctccgt ctgactgtgg gctgggagga gggaggcagg ggagagccgg tcacggtggc     900
tggtctttac tgcagggcag cactgtggcc agctgtctgt ctttacactg catgcagaag     960
tttaaacact gaagtgccga agtggcccgt gccgccgcac agagaccccg actttagttt    1020
gggctgttcc acgcttggct caccattgcc gcctgggact taacctgctc aggcgggcct    1080
tcgcccagct gcaaataggg atgcgttaga gactgttccc aaagcttgtt gggctcctta    1140
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ccagttaact tttgttaatt taagtgtggt cccttacaga tcgggagttg ttgctaaaaa    1260
gcaaactgaa gaaatgtttt gtttcaaaaa gggctacaga aagtaacctt gagtaaaatt    1320
aatctcagct acaaaactgt taccctccg catccaagct atacacttgg gttttgtttc    1380
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gagcggctcc tctggggatg ctgcactcag atcccacagc agctgcccag gctaacttga    1500
tccctgctgc ttcactgcac caatctccag cagacacagc tcgccgagct cttgggtttc    1560
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taagcagcag gaagctcaac ctaacgctgg ccacacgctg acagctgagc ccatctgaga 1620

acacggcatc ttcacacagc gagacgcctc cactgagggg aggcccggga gtatcaatct 1680

gtcaccagtg gccacggaga cctctcagca cccttagttc aaggtagtct ctgtggatca 1740

ggttggtaac acctactggt taatcaagtc ccactgggga aaggtttgga cggtagaatc 1800

aagagctgca gtttccttgg cccacaagat gctcttatgc tgtaaaaaaa atgctttaag 1860

aattgtttgc aaatgaattt acagggtggc cactggacac ttcagagttc ctatttactc 1920

cccccgccac agctaggaag accagcaaga actaaaggtt tgccgtttta ctatttaaaa 1980

tgtggacctc tttgtccagg agcgggaggg agaatggcat ctcaccccat tacaacagct 2040

ggggaactgg ctaaagagag ctgtcagaga gtatccttgg ctgtcctagg aatgactcat 2100

ggaaagcgcc ccagtgcagc agtgttttca ggaaaaccca gtgggcacgc gccatcgccc 2160

tctcctctcc tctcacgctc cttttgaaaa gaccgcactc ggcgcccaag gggacgtgct 2220

caagagctgc aggggcaggg cccaggcaaa aggtgggtga tgactacctg ctgctttccc 2280

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ggagtgcagt agcgcgatct cagctcactg caacctccgc ctcccgggtt caagcaattc 2760

tcctacctca gcctcccgag tagcggggac tacaggtgca tgccgccacg cccggttaat 2820

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gagctcagcc aatccgccca cctcggcctc ccaaagtgct gggattacag gtatgagcca 2940

ccatgcccag ccaagttcac aacttctgat atcaagttgt tgctgagaaa aggtcaggac 3000

acttcttaag tagagaagga ctgtgacatc ccctccaaac ctccatgtaa cactaacaaa 3060

tggcctcatt tacacgatta aaaacaaaat ggtatcgtca ataaatgcaa accttaaact 3120

gc 3122

<210> 347

<211> 2216

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (1)..(1542)

<223>

<400> 347

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Met Glu Gly Asp Ala Gln Leu Ala Val Glu Gly Val Ser Ile Gly Pro
1               5                   10                  15

ggg acc gca gtt cct cct gct cca cag gtt ctg agg acg tgg aga ttt       96
Gly Thr Ala Val Pro Pro Ala Pro Gln Val Leu Arg Thr Trp Arg Phe
            20                  25                  30

ggc act gag cgg gga tct gtg tgc tcc tct gtt gag ggg gag acc aac      144
Gly Thr Glu Arg Gly Ser Val Cys Ser Ser Val Glu Gly Glu Thr Asn
        35                  40                  45

tgt ttc ttc gaa aaa gcc cct tta tct aag ctc acc ccg ggc cca ttt      192
Cys Phe Phe Glu Lys Ala Pro Leu Ser Lys Leu Thr Pro Gly Pro Phe
    50                  55                  60

agc acc aca agc gac agt ttc tct gaa ttt tct gat gag tcc agc att      240
Ser Thr Thr Ser Asp Ser Phe Ser Glu Phe Ser Asp Glu Ser Ser Ile
65                  70                  75                  80

tct cat gct tca gtc cgt gat ggg agt ttt aaa aca aaa cta gac ggc      288
Ser His Ala Ser Val Arg Asp Gly Ser Phe Lys Thr Lys Leu Asp Gly
                85                  90                  95

agg tcg gga ggc agc cgc cga ttt ttg tcg ggt cct aaa caa aaa tca      336
Arg Ser Gly Gly Ser Arg Arg Phe Leu Ser Gly Pro Lys Gln Lys Ser
            100                 105                 110

aat gtg ttg cgc ttt gga act ctg ggc atc gtg ggc acc agg ctg acg      384
Asn Val Leu Arg Phe Gly Thr Leu Gly Ile Val Gly Thr Arg Leu Thr
        115                 120                 125

ggg gcg gcg ggg atg gcg ttt ctt ggc gag cgg gtc cct cag cca ggc      432
Gly Ala Ala Gly Met Ala Phe Leu Gly Glu Arg Val Pro Gln Pro Gly
    130                 135                 140

ccg ggt att gtc agg cgt ccc gtg gac ggt cgg gag ggg ctt cct gga      480
Pro Gly Ile Val Arg Arg Pro Val Asp Gly Arg Glu Gly Leu Pro Gly
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145 150 155 160

ggg ctc gtt ccg gga acg agt tca aag gag gaa agg gcg gca gct tcc 528
Gly Leu Val Pro Gly Thr Ser Ser Lys Glu Glu Arg Ala Ala Ala Ser
165 170 175

ggc gcc ttc ccc aga ggg ccg gga gac gca cgc cag gag ctt cct ccg 576
Gly Ala Phe Pro Arg Gly Pro Gly Asp Ala Arg Gln Glu Leu Pro Pro
180 185 190

ttg gaa gtc cct tcc gct ggc gac gtg ggc gct gtg gcc gcg gcc ctc 624
Leu Glu Val Pro Ser Ala Gly Asp Val Gly Ala Val Ala Ala Ala Leu
195 200 205

gtg gag cct gag ccc tcc tca cgg cct ccg cgc agc cct ggg gcc ccc 672
Val Glu Pro Glu Pro Ser Ser Arg Pro Pro Arg Ser Pro Gly Ala Pro
210 215 220

cgg cag ggt ccc tcg gca gcc cgc ggg aga ggc cgt ggg gcc ccg gca 720
Arg Gln Gly Pro Ser Ala Ala Arg Gly Arg Gly Arg Gly Ala Pro Ala
225 230 235 240

gga gtg tgg ttc aga gac gag gcg ccc tcg ccc ccg ccg ccc gca gag 768
Gly Val Trp Phe Arg Asp Glu Ala Pro Ser Pro Pro Pro Pro Ala Glu
245 250 255

gcc ccg aag gag ccg ctg cag ccc gag ccc gcc ccg ccg agg ccc agc 816
Ala Pro Lys Glu Pro Leu Gln Pro Glu Pro Ala Pro Pro Arg Pro Ser
260 265 270

ggc ccc gca acc gca gag gac cct ggg cga cgg ccc gtc ctg ccc cag 864
Gly Pro Ala Thr Ala Glu Asp Pro Gly Arg Arg Pro Val Leu Pro Gln
275 280 285

cgg ccc ccc gag gag agg ccg ccc cag ccg cca ggc tcc acc ggg gtc 912
Arg Pro Pro Glu Glu Arg Pro Pro Gln Pro Pro Gly Ser Thr Gly Val
290 295 300

atc gcg gag acg ggc cag gcc ggg ccc ccc gca ggc gca ggc gtg tct 960
Ile Ala Glu Thr Gly Gln Ala Gly Pro Pro Ala Gly Ala Gly Val Ser
305 310 315 320

ggg cgg ggt ctg ccg cgg ggc gtg gac ggc cag acc ggg agc ggc acc 1008
Gly Arg Gly Leu Pro Arg Gly Val Asp Gly Gln Thr Gly Ser Gly Thr
325 330 335

gtc ccc ggc gca gaa ggc ttc gcg ggc gca cca gga tac ccg aag tca 1056
Val Pro Gly Ala Glu Gly Phe Ala Gly Ala Pro Gly Tyr Pro Lys Ser
340 345 350

cct cct gta gct tcc cca gga gct ccg gtg cct tct ctg gtg tct ttt 1104
Pro Pro Val Ala Ser Pro Gly Ala Pro Val Pro Ser Leu Val Ser Phe
355 360 365

tct gcg ggg ctc acc cag aag cct ttc ccc agt gat ggg ggc gtt gtc 1152
Ser Ala Gly Leu Thr Gln Lys Pro Phe Pro Ser Asp Gly Gly Val Val
370 375 380

10005459.120301

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385                 390                 395                 400

acc ggg gtc ttc acg gct cct tat gat ggg cgc tac ctg atc acg gcc     1248
Thr Gly Val Phe Thr Ala Pro Tyr Asp Gly Arg Tyr Leu Ile Thr Ala
                405                 410                 415

acc ctc acc ccc gag aga gac gcc tac gtg gaa gca gtg ctg tcg gtc     1296
Thr Leu Thr Pro Glu Arg Asp Ala Tyr Val Glu Ala Val Leu Ser Val
            420                 425                 430

tcc aac gcc agc gtg gcc cag ctg cat acc gct ggg tac agg aga gag     1344
Ser Asn Ala Ser Val Ala Gln Leu His Thr Ala Gly Tyr Arg Arg Glu
        435                 440                 445

ttc ctg gaa tac cac cgc cct aca gga gct ttg cat acc tgc ggg ggc     1392
Phe Leu Glu Tyr His Arg Pro Thr Gly Ala Leu His Thr Cys Gly Gly
    450                 455                 460

ccg ggg gca ttc cac ctc atc gtg cac ctg aag gcg gga gat gca gtc     1440
Pro Gly Ala Phe His Leu Ile Val His Leu Lys Ala Gly Asp Ala Val
465                 470                 475                 480

aac gtc gtg gtg act ggg ggc aag ctg gct cac aca gac ttt gat gaa     1488
Asn Val Val Val Thr Gly Gly Lys Leu Ala His Thr Asp Phe Asp Glu
                485                 490                 495

atg tac tcc aca ttt agt ggg gtt ttc tta tat cct ttc ctt tcc cac     1536
Met Tyr Ser Thr Phe Ser Gly Val Phe Leu Tyr Pro Phe Leu Ser His
            500                 505                 510

ctc taa ggtggctggg gagatgtcag gggaaagata gatagttgta aaaactctaa     1592
Leu

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caactggaag acttggaaag gcctccacct gtatctacac tctgagggcc ctggactggg   1832

cctgagcttg ccacagaggc tccgtctgac tgtgggctgg gaggagggag gcaggggaga   1892

gccggtcacg gtggctggtc tttactgcag ggcagcactg tggccagctg tctgtcttta   1952

cactgcatgc agaagtttaa acactgaagt gccgaagtgg cccgtgccgc cgcacagaga   2012

ccccgacttt agtttgggct gttgcacgct tggctcacca ttgccacctg ggacttaacc   2072

tgctcaggcg ggccttcgcc cagctgcaaa tagggatgcg ttagagactg ttcccaaagc   2132

ttgttgggct ccttaaatgg catgtacaat ttaagtgcaa agacagggag tgtcaataaa   2192
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gatggaaagc caaaaaaaaa aaaa 2216

<210> 348

<211> 513

<212> PRT

<213> Homo sapiens

<400> 348

Met Glu Gly Asp Ala Gln Leu Ala Val Glu Gly Val Ser Ile Gly Pro
1 5 10 15

Gly Thr Ala Val Pro Pro Ala Pro Gln Val Leu Arg Thr Trp Arg Phe
20 25 30

Gly Thr Glu Arg Gly Ser Val Cys Ser Ser Val Glu Gly Glu Thr Asn
35 40 45

Cys Phe Phe Glu Lys Ala Pro Leu Ser Lys Leu Thr Pro Gly Pro Phe
50 55 60

Ser Thr Thr Ser Asp Ser Phe Ser Glu Phe Ser Asp Glu Ser Ser Ile
65 70 75 80

Ser His Ala Ser Val Arg Asp Gly Ser Phe Lys Thr Lys Leu Asp Gly
85 90 95

Arg Ser Gly Gly Ser Arg Arg Phe Leu Ser Gly Pro Lys Gln Lys Ser
100 105 110

Asn Val Leu Arg Phe Gly Thr Leu Gly Ile Val Gly Thr Arg Leu Thr
115 120 125

Gly Ala Ala Gly Met Ala Phe Leu Gly Glu Arg Val Pro Gln Pro Gly
130 135 140

Pro Gly Ile Val Arg Arg Pro Val Asp Gly Arg Glu Gly Leu Pro Gly
145 150 155 160

Gly Leu Val Pro Gly Thr Ser Ser Lys Glu Glu Arg Ala Ala Ala Ser
165 170 175

Gly Ala Phe Pro Arg Gly Pro Gly Asp Ala Arg Gln Glu Leu Pro Pro
180 185 190

Leu Glu Val Pro Ser Ala Gly Asp Val Gly Ala Val Ala Ala Ala Leu
195 200 205

Val Glu Pro Glu Pro Ser Ser Arg Pro Pro Arg Ser Pro Gly Ala Pro
210 215 220

Arg Gln Gly Pro Ser Ala Ala Arg Gly Arg Gly Arg Gly Ala Pro Ala
225 230 235 240

Gly Val Trp Phe Arg Asp Glu Ala Pro Ser Pro Pro Pro Pro Ala Glu
245 250 255

Ala Pro Lys Glu Pro Leu Gln Pro Glu Pro Ala Pro Pro Arg Pro Ser
260 265 270

Gly Pro Ala Thr Ala Glu Asp Pro Gly Arg Arg Pro Val Leu Pro Gln
275 280 285

Arg Pro Pro Glu Glu Arg Pro Pro Gln Pro Pro Gly Ser Thr Gly Val
290 295 300

Ile Ala Glu Thr Gly Gln Ala Gly Pro Pro Ala Gly Ala Gly Val Ser
305 310 315 320

Gly Arg Gly Leu Pro Arg Gly Val Asp Gly Gln Thr Gly Ser Gly Thr
325 330 335

Val Pro Gly Ala Glu Gly Phe Ala Gly Ala Pro Gly Tyr Pro Lys Ser
340 345 350

Pro Pro Val Ala Ser Pro Gly Ala Pro Val Pro Ser Leu Val Ser Phe
355 360 365

Ser Ala Gly Leu Thr Gln Lys Pro Phe Pro Ser Asp Gly Gly Val Val
370 375 380

Leu Phe Asn Lys Val Leu Val Asn Asp Gly Asp Val Tyr Asn Pro Ser
385 390 395 400

Thr Gly Val Phe Thr Ala Pro Tyr Asp Gly Arg Tyr Leu Ile Thr Ala
405 410 415

Thr Leu Thr Pro Glu Arg Asp Ala Tyr Val Glu Ala Val Leu Ser Val
420 425 430

Ser Asn Ala Ser Val Ala Gln Leu His Thr Ala Gly Tyr Arg Arg Glu
435 440 445

Phe Leu Glu Tyr His Arg Pro Thr Gly Ala Leu His Thr Cys Gly Gly
450 455 460

Pro Gly Ala Phe His Leu Ile Val His Leu Lys Ala Gly Asp Ala Val
465 470 475 480

Asn Val Val Val Thr Gly Gly Lys Leu Ala His Thr Asp Phe Asp Glu
485 490 495

Met Tyr Ser Thr Phe Ser Gly Val Phe Leu Tyr Pro Phe Leu Ser His
500 505 510

Leu

<210> 349

<211> 1542

<212> DNA

<213> Homo sapiens

<400> 349
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cctcctgctc cacaggttct gaggacgtgg agatttggca ctgagcgggg atctgtgtgc 120

tcctctgttg aggggagac caactgtttc ttcgaaaaag ccccttatc taagctcacc 180

ccgggcccat ttagcaccac aagcgacagt ttctctgaat tttctgatga gtccagcatt 240

tctcatgctt cagtccgtga tgggagtttt aaaacaaaac tagacggcag gtcgggaggc 300

agccgccgat ttttgtcggg tcctaaacaa aaatcaaatg tgttgcgctt tggaactctg 360

ggcatcgtgg gcaccaggct gacgggggcg gcggggatgg cgtttcttgg cgagcgggtc 420

cctcagccag gcccgggtat tgtcaggcgt cccgtggacg gtcgggaggg gcttcctgga 480

gggctcgttc cgggaacgag ttcaaaggag gaaagggcgg cagcttccgg cgccttcccc 540

agagggccgg gagacgcacg ccaggagctt cctccgttgg aagtcccttc cgctggcgac 600

gtgggcgctg tggccgcggc cctcgtggag cctgagccct cctcacggcc tccgcgcagc 660

cctggggccc cccggcaggg tccctcggca gcccgcggga gaggccgtgg ggccccggca 720

ggagtgtggt tcagagacga ggcgccctcg cccccgccgc ccgcagaggc cccgaaggag 780

ccgctgcagc ccgagcccgc cccgccgagg cccagcggcc ccgcaaccgc agaggaccct 840

gggcgacggc ccgtcctgcc ccagcggccc cccgaggaga ggccgcccca gccgccaggc 900

tccaccgggg tcatcgcgga gacgggccag gccgggcccc ccgcaggcgc aggcgtgtct 960

gggcggggtc tgccgcgggg cgtggacggc cagaccggga gcggcaccgt ccccggcgca 1020

gaaggcttcg cgggcgcacc aggatacccg aagtcacctc ctgtagcttc cccaggagct 1080

ccggtgcctt ctctggtgtc tttttctgcg gggctcaccc agaagccttt ccccagtgat 1140

gggggcgttg tcctctttaa caaagtgctg gtgaacgacg gggatgttta caaccccagc 1200

accggggtct tcacggctcc ttatgatggg cgctacctga tcacggccac cctcaccccc 1260

gagagagacg cctacgtgga agcagtgctg tcggtctcca acgccagcgt ggcccagctg 1320

cataccgctg ggtacaggag agagttcctg gaataccacc gccctacagg agctttgcat 1380

acctgcgggg gcccgggggc attccacctc atcgtgcacc tgaaggcggg agatgcagtc 1440

aacgtcgtgg tgactggggg caagctggct cacacagact ttgatgaaat gtactccaca 1500

tttagtgggg ttttcttata tcctttcctt tcccacctct aa 1542

<210> 350

<211> 36

<212> PRT

<213> Homo sapiens

<400> 350

Val Val Leu Phe Asn Lys Val Leu Val Asn Asp Gly Asp Val Tyr Asn
1 5 10 15

Pro Ser Thr Gly Val Phe Thr Ala Pro Tyr Asp Gly Arg Tyr Leu Ile

20 25 30

Thr Ala Thr Leu
35

<210> 351

<211> 27

<212> PRT

<213> Homo sapiens

<400> 351

Phe Pro Ser Asp Gly Gly Val Val Leu Phe Asn Lys Val Leu Val Asn
1 5 10 15

Asp Gly Asp Val Tyr Asn Pro Ser Thr Gly Val
20 25

<210> 352

<211> 171

<212> PRT

<213> Homo sapiens

<400> 352

Glu Thr Ser Leu Glu Arg Glu Arg Leu Ser Phe Cys Thr Gly Ser Arg
1 5 10 15

Thr Thr Arg Ser Ala Glu Leu Lys Ala Val Gly Phe Glu Ala Ala Leu
20 25 30

Gln Glu Val Ile Thr Pro Glu Val Val Pro Ala Ser Gln Ser Glu Ala
35 40 45

Tyr Gln Thr Leu Arg Gln Asn Gln Ala Gln Val His Asn Phe Phe Phe
50 55 60

Phe Trp Gly Gly Asp Ser Pro Thr Leu Ser Pro Arg Leu Glu Cys Ser
65 70 75 80

Ser Ala Ile Ser Ala His Cys Asn Leu Arg Leu Pro Gly Ser Ser Asn
85 90 95

Ser Pro Thr Ser Ala Ser Arg Val Ala Gly Thr Thr Gly Ala Cys Arg
100 105 110

His Ala Arg Leu Ile Phe Cys Ile Leu Val Glu Met Gly Phe His Arg
115 120 125

Val Ala Gln Ala Gly Arg Glu Leu Leu Ser Ser Ala Asn Pro Pro Thr
130 135 140

Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Met Ser His His Ala Gln
145 150 155 160

Pro Ser Ser Gln Leu Leu Ile Ser Ser Cys Cys
165 170

<210> 353

<211> 418

<212> DNA

<213> Homo sapiens

<400> 353
gaattcttcg tcgacgattc cgtgtccact gggaggaggg agcaggccgg acgtctgccc 60

cgtccccggt gggtgcgggg gcgtcaggtg ggcaaaaccc cagcgagggg aagctccagg 120

atcgttgcag tgccatttct aggtccctcc tcctctcccc acttcccttt tctctgcacc 180

catttgacag gagcctctgc aatcatctgc ttattgcgcg tcaccgtcat ccagtgggag 240

agccttgtgg taccaccttt ctccacctat ggctgcggcc cgcaggaaga tgacgggttg 300

ctcttctgct ctggagccat ccctgttgcc ggtaactgca acccgcaaga tgatgccaga 360

gctcagcttc cctcttttta tgttgcaaag tatatgctgc cctgcactga gcagaccc 418

<210> 354

<211> 1613

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (683)..(1564)

<223>

<400> 354

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ctagcaggga ctggggccgc ggcaggggta gcaaggtgag tcggtgcttg ccaagaggca     120

gagcgcaaaa cctactagga gatcgcgccc ggtgagcagc acccgcagct cagagcccgg     180

gacgtccgga gcgcggggag cagtcccctc tccatcaggg agtggtctat ctgggcagtc     240

tgggacccag gcaccgcgcc atccctgaga gagcagcagt ctggagagca ggcatctcag     300

atccctaaga aaccagccgt ccgagaagcc gcggatctca ggtgcccagg atcgttagga     360

ctgaacggga gggtactaga ggaccactgg ctctggaccg tcgggagctg cccctgacgt     420

aacccacgag gggcctcccc ttgacggacg gcttggggag cggcaccgcc ggcctggagc     480

ccgcagaggc agggtaaggg gagcgggggg cagccgtcgg gggagtgcag acccaggccc     540

aaggcgggtc accgctcctg gcccgcggag agccccggcc ccggcagcca ttgcgcccaa     600

gagtgaggaa gatttgctgg ccctggcagc gtcgcggctg agccggcgca agagggtggc     660

gggcgcggcc gtcggagtgg cc atg gtg ctg ctg ctg ctg gtg gcc atc ccg      712
                         Met Val Leu Leu Leu Leu Val Ala Ile Pro
                         1               5                   10

ctg ctg gtg cac agc tcc cgc ggg cca gcg cac tac gag atg ctg ggt      760
Leu Leu Val His Ser Ser Arg Gly Pro Ala His Tyr Glu Met Leu Gly
                15                  20                  25

cgc tgc cgc atg gtg tgc gac ccg cat ggg ccc cgt ggc cct ggt ccc      808
Arg Cys Arg Met Val Cys Asp Pro His Gly Pro Arg Gly Pro Gly Pro
            30                  35                  40

gac ggc gcg cct gct tcc gtg ccc ccc ttc ccg cca ggc gcc aag gga      856
Asp Gly Ala Pro Ala Ser Val Pro Pro Phe Pro Pro Gly Ala Lys Gly
        45                  50                  55

gag gtg ggc cgg cgc ggg aaa gca ggc ctg cgg ggg ccc cct gga cca      904
Glu Val Gly Arg Arg Gly Lys Ala Gly Leu Arg Gly Pro Pro Gly Pro
    60                  65                  70
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cca ggt cca aga ggg ccc cca gga gaa ccc ggc agg cca ggc ccc ccg      952
Pro Gly Pro Arg Gly Pro Pro Gly Glu Pro Gly Arg Pro Gly Pro Pro
75                  80                  85                  90

ggc cct ccc ggt cca ggt ccg ggc ggg gtg gcg ccc gct gcc ggc tac     1000
Gly Pro Pro Gly Pro Gly Pro Gly Gly Val Ala Pro Ala Ala Gly Tyr
                95                  100                 105

gtg cct cgc att gct ttc tac gcg ggc ctg cgg cgg ccc cac gag ggt     1048
Val Pro Arg Ile Ala Phe Tyr Ala Gly Leu Arg Arg Pro His Glu Gly
            110                 115                 120

tac gag gtg ctg cgc ttc gac gac gtg gtg acc aac gtg ggc aac gcc     1096
Tyr Glu Val Leu Arg Phe Asp Asp Val Val Thr Asn Val Gly Asn Ala
        125                 130                 135

tac gag gca gcc agc ggc aag ttt act tgc ccc atg cca ggc gtc tac     1144
Tyr Glu Ala Ala Ser Gly Lys Phe Thr Cys Pro Met Pro Gly Val Tyr
    140                 145                 150

ttc ttc gct tac cac gtg ctc atg cgc ggc ggc gac ggc acc agc atg     1192
Phe Phe Ala Tyr His Val Leu Met Arg Gly Gly Asp Gly Thr Ser Met
155                 160                 165                 170

tgg gcc gac ctc atg aag aac gga cag ggc tgg ggg cct aga acg gcc     1240
Trp Ala Asp Leu Met Lys Asn Gly Gln Gly Trp Gly Pro Arg Thr Ala
                175                 180                 185

ttg ccc tca gca gag tct gtg gct tgg cag ctc aag ggc cag cca gga     1288
Leu Pro Ser Ala Glu Ser Val Ala Trp Gln Leu Lys Gly Gln Pro Gly
            190                 195                 200

gcc tct gca atc atc tgc tta ttg cgc gtc acc gtc atc cag tgg gag     1336
Ala Ser Ala Ile Ile Cys Leu Leu Arg Val Thr Val Ile Gln Trp Glu
        205                 210                 215

agc ctt gtg gta cca cct ttc tcc acc tat ggc tgc ggc ccg cag gaa     1384
Ser Leu Val Val Pro Pro Phe Ser Thr Tyr Gly Cys Gly Pro Gln Glu
    220                 225                 230

gat gac ggg ttg cgc ttc tgc tct gga gcc agc cct gtt gcc ggg aac     1432
Asp Asp Gly Leu Arg Phe Cys Ser Gly Ala Ser Pro Val Ala Gly Asn
235                 240                 245                 250

tgc aac ccg caa gat gat gcc aga gct cag ctt ccc tct ttt tat gtt     1480
Cys Asn Pro Gln Asp Asp Ala Arg Ala Gln Leu Pro Ser Phe Tyr Val
                255                 260                 265

gca gag ttt atg ctg ccc tgc act gag cag acg ctt tcg ctt acg cag     1528
Ala Glu Phe Met Leu Pro Cys Thr Glu Gln Thr Leu Ser Leu Thr Gln
            270                 275                 280

ccc tgc cct tca cct tgc cca gtg att ccg gaa taa ccttccggac          1574
Pro Cys Pro Ser Pro Cys Pro Val Ile Pro Glu
        285                 290
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cctcctactt gcagaggttc gttgcttcaa gcgtcataa 1613

<210> 355

<211> 293

<212> PRT

<213> Homo sapiens

<400> 355

Met Val Leu Leu Leu Leu Val Ala Ile Pro Leu Leu Val His Ser Ser
1 5 10 15

Arg Gly Pro Ala His Tyr Glu Met Leu Gly Arg Cys Arg Met Val Cys
20 25 30

Asp Pro His Gly Pro Arg Gly Pro Gly Pro Asp Gly Ala Pro Ala Ser
35 40 45

Val Pro Pro Phe Pro Pro Gly Ala Lys Gly Glu Val Gly Arg Arg Gly
50 55 60

Lys Ala Gly Leu Arg Gly Pro Pro Gly Pro Pro Gly Pro Arg Gly Pro
65 70 75 80

Pro Gly Glu Pro Gly Arg Pro Gly Pro Pro Gly Pro Pro Gly Pro Gly
85 90 95

Pro Gly Gly Val Ala Pro Ala Ala Gly Tyr Val Pro Arg Ile Ala Phe
100 105 110

Tyr Ala Gly Leu Arg Arg Pro His Glu Gly Tyr Glu Val Leu Arg Phe
115 120 125

Asp Asp Val Val Thr Asn Val Gly Asn Ala Tyr Glu Ala Ala Ser Gly
130 135 140

Lys Phe Thr Cys Pro Met Pro Gly Val Tyr Phe Phe Ala Tyr His Val
145 150 155 160

Leu Met Arg Gly Gly Asp Gly Thr Ser Met Trp Ala Asp Leu Met Lys
165 170 175

Asn Gly Gln Gly Trp Gly Pro Arg Thr Ala Leu Pro Ser Ala Glu Ser
180 185 190

Val Ala Trp Gln Leu Lys Gly Gln Pro Gly Ala Ser Ala Ile Ile Cys
195 200 205

Leu Leu Arg Val Thr Val Ile Gln Trp Glu Ser Leu Val Val Pro Pro
210 215 220

Phe Ser Thr Tyr Gly Cys Gly Pro Gln Glu Asp Asp Gly Leu Arg Phe
225 230 235 240

Cys Ser Gly Ala Ser Pro Val Ala Gly Asn Cys Asn Pro Gln Asp Asp
245 250 255

Ala Arg Ala Gln Leu Pro Ser Phe Tyr Val Ala Glu Phe Met Leu Pro
260 265 270

Cys Thr Glu Gln Thr Leu Ser Leu Thr Gln Pro Cys Pro Ser Pro Cys
275 280 285

Pro Val Ile Pro Glu
290

<210> 356

<211> 882

<212> DNA

<213> Homo sapiens

<400> 356
atggtgctgc tgctgctggt ggccatcccg ctgctggtgc acagctcccg cgggccagcg 60

cactacgaga tgctgggtcg ctgccgcatg gtgtgcgacc cgcatgggcc ccgtggccct 120

ggtcccgacg gcgcgcctgc ttccgtgccc cccttcccgc caggcgccaa gggagaggtg 180

ggccggcgcg ggaaagcagg cctgcggggg ccccctggac caccaggtcc aagagggccc 240

ccaggagaac ccggcaggcc aggcccccgg ggccctcccg gtccaggtcc gggcggggtg 300

gcgcccgctg ccggctacgt gcctcgcatt gctttctacg cgggcctgcg gcggccccac 360

gagggttacg aggtgctgcg cttcgacgac gtggtgacca acgtgggcaa cgcctacgag 420

gcagccagcg gcaagtttac ttgccccatg ccaggcgtct acttcttcgc ttaccacgtg 480

ctcatgcgcg gcggcgacgg caccagcatg tgggccgacc tcatgaagaa cggacagggc 540

tgggggccta gaacggcctt gccctcagca gagtctgtgg cttggcagct caagggccag 600

ccaggagcct ctgcaatcat ctgcttattg cgcgtcaccg tcatccagtg ggagagcctt 660

gtggtaccac ctttctccac ctatggctgc ggcccgcagg aagatgacgg gttgcgcttc 720

tgctctggag ccagccctgt tgccgggaac tgcaacccgc aagatgatgc cagagctcag 780

cttccctctt tttatgttgc agagtttatg ctgccctgca ctgagcagac gctttcgctt 840

acgcagccct gcccttcacc ttgcccagtg attccggaat aa 882

<210> 357

<211> 15

<212> PRT

<213> Homo sapiens

<400> 357

Met Val Leu Leu Leu Leu Val Ala Ile Pro Leu Leu Val His Ser
1 5 10 15

<210> 358

<211> 278

<212> PRT

<213> Homo sapiens

<400> 358

Ser Arg Gly Pro Ala His Tyr Glu Met Leu Gly Arg Cys Arg Met Val
1 5 10 15

Cys Asp Pro His Gly Pro Arg Gly Pro Gly Pro Asp Gly Ala Pro Ala
20 25 30

Ser Val Pro Pro Phe Pro Pro Gly Ala Lys Gly Glu Val Gly Arg Arg
35 40 45

Gly Lys Ala Gly Leu Arg Gly Pro Pro Gly Pro Pro Gly Pro Arg Gly
50 55 60

Pro Pro Gly Glu Pro Gly Arg Pro Gly Pro Pro Gly Pro Pro Gly Pro
65 70 75 80

Gly Pro Gly Gly Val Ala Pro Ala Ala Gly Tyr Val Pro Arg Ile Ala
85 90 95

Phe Tyr Ala Gly Leu Arg Arg Pro His Glu Gly Tyr Glu Val Leu Arg
100 105 110

Phe Asp Asp Val Val Thr Asn Val Gly Asn Ala Tyr Glu Ala Ala Ser
115 120 125

Gly Lys Phe Thr Cys Pro Met Pro Gly Val Tyr Phe Phe Ala Tyr His
130 135 140

Val Leu Met Arg Gly Gly Asp Gly Thr Ser Met Trp Ala Asp Leu Met
145 150 155 160

Lys Asn Gly Gln Gly Trp Gly Pro Arg Thr Ala Leu Pro Ser Ala Glu
165 170 175

Ser Val Ala Trp Gln Leu Lys Gly Gln Pro Gly Ala Ser Ala Ile Ile
180 185 190

Cys Leu Leu Arg Val Thr Val Ile Gln Trp Glu Ser Leu Val Val Pro
195 200 205

Pro Phe Ser Thr Tyr Gly Cys Gly Pro Gln Glu Asp Asp Gly Leu Arg
210 215 220

Phe Cys Ser Gly Ala Ser Pro Val Ala Gly Asn Cys Asn Pro Gln Asp
225 230 235 240

Asp Ala Arg Ala Gln Leu Pro Ser Phe Tyr Val Ala Glu Phe Met Leu
245 250 255

Pro Cys Thr Glu Gln Thr Leu Ser Leu Thr Gln Pro Cys Pro Ser Pro
260 265 270

Cys Pro Val Ile Pro Glu
275

<210> 359

<211> 36

<212> PRT

<213> Homo sapiens

<400> 359

Val Leu Arg Phe Asp Asp Val Val Thr Asn Val Gly Asn Ala Tyr Glu
1 5 10 15

Ala Ala Ser Gly Lys Phe Thr Cys Pro Met Pro Gly Val Tyr Phe Phe
20 25 30

Ala Tyr His Val
35

<210> 360

<211> 20

<212> PRT

<213> Homo sapiens

<400> 360

Phe Thr Cys Pro Met Pro Gly Val Tyr Phe Phe Ala Tyr His Val Leu
1 5 10 15

Met Arg Gly Gly
20

<210> 361

<211> 27

<212> PRT

<213> Homo sapiens

Replacement Sheet

<400> 361

Gly Pro Pro Gly Pro Arg Gly Pro Pro Gly Glu Pro Gly Arg Pro Gly
1 5 10 15

Pro Pro Gly Pro Pro Gly Pro Gly Pro Gly Gly
20 25

<210> 362

<211> 27

<212> PRT

<213> Homo sapiens

<400> 362

Gly Pro Pro Gly Pro Pro Gly Pro Arg Gly Pro Pro Gly Glu Pro Gly
1 5 10 15

Arg Pro Gly Pro Pro Gly Pro Pro Gly Pro Gly
20 25

<210> 363

<211> 27

<212> PRT

<213> Homo sapiens

<400> 363

Gly Lys Ala Gly Leu Arg Gly Pro Pro Gly Pro Pro Gly Pro Arg Gly
1 5 10 15

Pro Pro Gly Glu Pro Gly Arg Pro Gly Pro Pro
20 25

<210> 364

<211> 27

<212> PRT

Replacement Sheet

<213> Homo sapiens

<400> 364

Gly Pro Pro Gly Glu Pro Gly Arg Pro Gly Pro Pro Gly Pro Pro Gly
1 5 10 15

Pro Gly Pro Gly Gly Val Ala Pro Ala Ala Gly
20 25

<210> 365

<211> 29

<212> PRT

<213> Homo sapiens

<400> 365

Gly Pro Pro Gly Pro Arg Gly Pro Pro Gly Glu Pro Gly Arg Pro Gly
1 5 10 15

Pro Pro Gly Pro Pro Gly Pro Gly Pro Gly Gly Val Ala
20 25

<210> 366

<211> 27

<212> PRT

<213> Homo sapiens

<400> 366

Gly Leu Arg Gly Pro Pro Gly Pro Pro Gly Pro Arg Gly Pro Pro Gly
1 5 10 15

Glu Pro Gly Arg Pro Gly Pro Pro Gly Pro Pro
20 25

<210> 367

<211> 29

<212> PRT

<213> Homo sapiens

<400> 367

Gly Pro Pro Gly Pro Pro Gly Pro Arg Gly Pro Pro Gly Glu Pro Gly
1 5 10 15

Arg Pro Gly Pro Pro Gly Pro Pro Gly Pro Gly Pro Gly
20 25

<210> 368

<211> 29

<212> PRT

<213> Homo sapiens

<400> 368

Gly Ala Lys Gly Glu Val Gly Arg Arg Gly Lys Ala Gly Leu Arg Gly
1 5 10 15

Pro Pro Gly Pro Pro Gly Pro Arg Gly Pro Pro Gly Glu
20 25

<210> 369

<211> 27

<212> PRT

<213> Homo sapiens

<400> 369

Pro His Glu Gly Tyr Glu Val Leu Arg Phe Asp Asp Val Val Thr Asn
1 5 10 15

Val Gly Asn Ala Tyr Glu Ala Ala Ser Gly Lys
20 25

<210> 370

<211> 14

<212> PRT

<213> Homo sapiens

<400> 370

Gly Pro Pro Gly Pro Pro Gly Pro Arg Gly Pro Pro Gly Glu
1 5 10

<210> 371

<211> 27

<212> PRT

<213> Homo sapiens

<400> 371

Gly Glu Pro Gly Arg Pro Gly Pro Pro Gly Pro Pro Gly Pro Gly Pro
1 5 10 15

Gly Gly Val Ala Pro Ala Ala Gly Tyr Val Pro
20 25

<210> 372

<211> 27

<212> PRT

<213> Homo sapiens

<400> 372

Gly Pro Arg Gly Pro Pro Gly Glu Pro Gly Arg Pro Gly Pro Pro Gly
1 5 10 15

Pro Pro Gly Pro Gly Pro Gly Gly Val Ala Pro
20 25

<210> 373

<211> 24

<212> PRT

<213> Homo sapiens

<400> 373

Gly Glu Pro Gly Arg Pro Gly Pro Pro Gly Pro Pro Gly Pro Gly Pro
1 5 10 15

Gly Gly Val Ala Pro Ala Ala Gly
20

<210> 374

<211> 44

<212> PRT

<213> Homo sapiens

<400> 374

Arg Arg Gly Lys Ala Gly Leu Arg Gly Pro Pro Gly Pro Pro Gly Pro
1 5 10 15

Arg Gly Pro Pro Gly Glu Pro Gly Arg Pro Gly Pro Pro Gly Pro Pro
20 25 30

Gly Pro Gly Pro Gly Gly Val Ala Pro Ala Ala Gly
35 40

<210> 375

<211> 27

<212> PRT

<213> Homo sapiens

<400> 375

Gly Arg Arg Gly Lys Ala Gly Leu Arg Gly Pro Pro Gly Pro Pro Gly

1 5 10 15

Pro Arg Gly Pro Pro Gly Glu Pro Gly Arg Pro
20 25

<210> 376

<211> 29

<212> PRT

<213> Homo sapiens

<400> 376

Phe Pro Pro Gly Ala Lys Gly Glu Val Gly Arg Arg Gly Lys Ala Gly
1 5 10 15

Leu Arg Gly Pro Pro Gly Pro Pro Gly Pro Arg Gly Pro
20 25

<210> 377

<211> 2016

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (683)..(1399)

<223>

<400> 377
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ctagcaggga ctggggccgc ggcaggggta gcaaggtgag tcggtgcttg ccaagaggca 120

gagcgcaaaa cctactagga gatcgcgccc ggtgagcagc acccgcagct cagagcccgg 180

gacgtccgga gcgcggggag cagtcccctc tccatcaggg agtggtctat ctgggcagtc 240

tgggacccag gcaccgcgcc atccctgaga gagcagcagt ctggagagca ggcatctcag 300

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atccctaaga aaccagccgt ccgagaagcc gcggatctca ggtgcccagg atcgttagga     360

ctgaacggga gggtactaga ggaccactgg ctctggaccg tcgggagctg cccctgacgt     420

aacccacgag gggcctcccc ttgacggacg gcttggggag cggcaccgcc ggcctggagc     480

ccgcagaggc agggtaaggg gagcgggggg cagccgtcgg gggagtgcag acccaggccc     540

aaggcgggtc accgctcctg gcccgcggag agccccggcc ccggcagcca ttgcgcccaa     600

gagtgaggaa gatttgctgg ccctggcagc gtcgcggctg agccggcgca agagggtggc     660

gggcgcggcc gtcggagtgg cc atg gtg ctg ctg ctg ctg gtg gcc atc ccg      712
                         Met Val Leu Leu Leu Leu Val Ala Ile Pro
                         1               5                   10

ctg ctg gtg cac agc tcc cgc ggg cca gcg cac tac gag atg ctg ggt      760
Leu Leu Val His Ser Ser Arg Gly Pro Ala His Tyr Glu Met Leu Gly
                15                  20                  25

cgc tgc cgc atg gtg tgc gac ccg cat ggg ccc cgt ggc cct ggt ccc      808
Arg Cys Arg Met Val Cys Asp Pro His Gly Pro Arg Gly Pro Gly Pro
            30                  35                  40

gac ggc gcg cct gct tcc gtg ccc ccc ttc ccg cca ggc gcc aag gga      856
Asp Gly Ala Pro Ala Ser Val Pro Pro Phe Pro Pro Gly Ala Lys Gly
        45                  50                  55

gag gtg ggc cgg cgc ggg aaa gca ggc ctg cgg ggg ccc cct gga cca      904
Glu Val Gly Arg Arg Gly Lys Ala Gly Leu Arg Gly Pro Pro Gly Pro
    60                  65                  70

cca ggt cca aga ggg ccc cca gga gaa ccc ggc agg cca ggc ccc ccg      952
Pro Gly Pro Arg Gly Pro Pro Gly Glu Pro Gly Arg Pro Gly Pro Pro
75                  80                  85                  90

ggc cct ccc ggt cca ggt ccg ggc ggg gtg gcg ccc gct gcc ggc tac     1000
Gly Pro Pro Gly Pro Gly Pro Gly Gly Val Ala Pro Ala Ala Gly Tyr
                95                  100                 105

gtg cct cgc att gct ttc tac gcg ggc ctg cgg cgg ccc cac gag ggt     1048
Val Pro Arg Ile Ala Phe Tyr Ala Gly Leu Arg Arg Pro His Glu Gly
            110                 115                 120

tac gag gtg ctg cgc ttc gac gac gtg gtg acc aac gtg ggc aac gcc     1096
Tyr Glu Val Leu Arg Phe Asp Asp Val Val Thr Asn Val Gly Asn Ala
        125                 130                 135

tac gag gca gcc agc ggc aag ttt act tgc ccc atg cca ggc gtc tac     1144
Tyr Glu Ala Ala Ser Gly Lys Phe Thr Cys Pro Met Pro Gly Val Tyr
    140                 145                 150

ttc ttc gct tac cac gtg ctc atg cgc ggc ggc gac ggc acc agc atg     1192
Phe Phe Ala Tyr His Val Leu Met Arg Gly Gly Asp Gly Thr Ser Met
155                 160                 165                 170
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tgg gcc gac ctc atg aag aac gga cag gtc cgg gcc agc gcc att gct 1240
Trp Ala Asp Leu Met Lys Asn Gly Gln Val Arg Ala Ser Ala Ile Ala
175 180 185

cag gac gcg gac cag aac tac gac tac gcc agc aac agc gtc att ctg 1288
Gln Asp Ala Asp Gln Asn Tyr Asp Tyr Ala Ser Asn Ser Val Ile Leu
190 195 200

cac ctg gac gtg ggc gac gag gtc ttc atc aag ctg gac ggc ggg aaa 1336
His Leu Asp Val Gly Asp Glu Val Phe Ile Lys Leu Asp Gly Gly Lys
205 210 215

gtg cac ggc ggc aac acc aac aag tac agc acc ttc tcc ggc ttc atc 1384
Val His Gly Gly Asn Thr Asn Lys Tyr Ser Thr Phe Ser Gly Phe Ile
220 225 230

atc tac ccc gac tga gccggccccg ccccgtgccc ccgctcgccc cttctctccc 1439
Ile Tyr Pro Asp
235

gtcctcaccc acctcctgcc cgccccaccc gaggcgccac cccacccttt gagagcctgg 1499

cggtggggtg gacccttccg ttcccggagg cggcctaaat gggcgaactc ttggtgctca 1559

agggtataag tggccgggaa gaggaggaga cccggccaga ggagcagagc gacttccgga 1619

gggatcaccc gcacccaagt gcgcgctgga ccccataggg gcagaggtcg tggctttctc 1679

ttttgtacag agatggggag cagttttaat agcgggactc agaggcccag aaagccggag 1739

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gaagacatta aaacagggta gtgcaggttc tccgtcacaa ctttctctcg ccaccctctc 1859

gtcccctcgt ctccactttc aggctcaggc tccagccttg gcagccttcc tgtgaactgg 1919

aggaaccagt gaattctttc ctggcattta aaacgcattc tgtacagtcc ccattccccc 1979

ctatccggac taggccctgg ggctacagct gctgctg 2016

<210> 378

<211> 238

<212> PRT

<213> Homo sapiens

<400> 378

Met Val Leu Leu Leu Leu Val Ala Ile Pro Leu Leu Val His Ser Ser
1 5 10 15

10005459.120301

Arg Gly Pro Ala His Tyr Glu Met Leu Gly Arg Cys Arg Met Val Cys
20 25 30

Asp Pro His Gly Pro Arg Gly Pro Gly Pro Asp Gly Ala Pro Ala Ser
35 40 45

Val Pro Pro Phe Pro Pro Gly Ala Lys Gly Glu Val Gly Arg Arg Gly
50 55 60

Lys Ala Gly Leu Arg Gly Pro Pro Gly Pro Pro Gly Pro Arg Gly Pro
65 70 75 80

Pro Gly Glu Pro Gly Arg Pro Gly Pro Pro Gly Pro Pro Gly Pro Gly
85 90 95

Pro Gly Gly Val Ala Pro Ala Ala Gly Tyr Val Pro Arg Ile Ala Phe
100 105 110

Tyr Ala Gly Leu Arg Arg Pro His Glu Gly Tyr Glu Val Leu Arg Phe
115 120 125

Asp Asp Val Val Thr Asn Val Gly Asn Ala Tyr Glu Ala Ala Ser Gly
130 135 140

Lys Phe Thr Cys Pro Met Pro Gly Val Tyr Phe Phe Ala Tyr His Val
145 150 155 160

Leu Met Arg Gly Gly Asp Gly Thr Ser Met Trp Ala Asp Leu Met Lys
165 170 175

Asn Gly Gln Val Arg Ala Ser Ala Ile Ala Gln Asp Ala Asp Gln Asn
180 185 190

Tyr Asp Tyr Ala Ser Asn Ser Val Ile Leu His Leu Asp Val Gly Asp
195 200 205

Glu Val Phe Ile Lys Leu Asp Gly Gly Lys Val His Gly Gly Asn Thr
210 215 220

Asn Lys Tyr Ser Thr Phe Ser Gly Phe Ile Ile Tyr Pro Asp
225 230 235

<210> 379

<211> 717

<212> DNA

<213> Homo sapiens

<400> 379
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cactacgaga tgctgggtcg ctgccgcatg gtgtgcgacc cgcatgggcc ccgtggccct 120

ggtcccgacg gcgcgcctgc ttccgtgccc cccttcccgc caggcgccaa gggagaggtg 180

ggccggcgcg ggaaagcagg cctgcggggg ccccctggac caccaggtcc aagagggccc 240

ccaggagaac ccggcaggcc aggccccccg ggccctcccg gtccaggtcc gggcggggtg 300

gcgcccgctg ccggctacgt gcctcgcatt gctttctacg cgggcctgcg gcggccccac 360

gagggttacg aggtgctgcg cttcgacgac gtggtgacca acgtgggcaa cgcctacgag 420

gcagccagcg gcaagtttac ttgccccatg ccaggcgtct acttcttcgc ttaccacgtg 480

ctcatgcgcg gcggcgacgg caccagcatg tgggccgacc tcatgaagaa cggacaggtc 540

cgggccagcg ccattgctca ggacgcggac cagaactacg actacgccag caacagcgtc 600

attctgcacc tggacgtggg cgacgaggtc ttcatcaagc tggacggcgg gaaagtgcac 660

ggcggcaaca ccaacaagta cagcaccttc tccggcttca tcatctaccc cgactga 717

<210> 380

<211> 223

<212> PRT

<213> Homo sapiens

<400> 380

Ser Arg Gly Pro Ala His Tyr Glu Met Leu Gly Arg Cys Arg Met Val
1 5 10 15

Cys Asp Pro His Gly Pro Arg Gly Pro Gly Pro Asp Gly Ala Pro Ala
20 25 30

Ser Val Pro Pro Phe Pro Pro Gly Ala Lys Gly Glu Val Gly Arg Arg
35 40 45

Gly Lys Ala Gly Leu Arg Gly Pro Pro Gly Pro Pro Gly Pro Arg Gly
50 55 60

Pro Pro Gly Glu Pro Gly Arg Pro Gly Pro Pro Gly Pro Pro Gly Pro
65 70 75 80

Gly Pro Gly Gly Val Ala Pro Ala Ala Gly Tyr Val Pro Arg Ile Ala
85 90 95

Phe Tyr Ala Gly Leu Arg Arg Pro His Glu Gly Tyr Glu Val Leu Arg
100 105 110

Phe Asp Asp Val Val Thr Asn Val Gly Asn Ala Tyr Glu Ala Ala Ser
115 120 125

Gly Lys Phe Thr Cys Pro Met Pro Gly Val Tyr Phe Phe Ala Tyr His
130 135 140

Val Leu Met Arg Gly Gly Asp Gly Thr Ser Met Trp Ala Asp Leu Met
145 150 155 160

Lys Asn Gly Gln Val Arg Ala Ser Ala Ile Ala Gln Asp Ala Asp Gln
165 170 175

Asn Tyr Asp Tyr Ala Ser Asn Ser Val Ile Leu His Leu Asp Val Gly
180 185 190

Asp Glu Val Phe Ile Lys Leu Asp Gly Gly Lys Val His Gly Gly Asn
195 200 205

Thr Asn Lys Tyr Ser Thr Phe Ser Gly Phe Ile Ile Tyr Pro Asp
210 215 220

<210> 381

<211> 36

<212> PRT

<213> Homo sapiens

<400> 381

Val Leu Arg Phe Asp Asp Val Val Thr Asn Val Gly Asn Ala Tyr Glu
1 5 10 15

Ala Ala Ser Gly Lys Phe Thr Cys Pro Met Pro Gly Val Tyr Phe Phe
20 25 30

Ala Tyr His Val
35

<210> 382

<211> 20

<212> PRT

<213> Homo sapiens

<400> 382

Phe Thr Cys Pro Met Pro Gly Val Tyr Phe Phe Ala Tyr His Val Leu
1 5 10 15

Met Arg Gly Gly
20

<210> 383

<211> 27

<212> PRT

<213> Homo sapiens

<400> 383

Gly Pro Pro Gly Pro Arg Gly Pro Pro Gly Glu Pro Gly Arg Pro Gly
1 5 10 15

Pro Pro Gly Pro Pro Gly Pro Gly Pro Gly Gly
20 25

<210> 384

<211> 27

<212> PRT

<213> Homo sapiens

<400> 384

Gly Pro Pro Gly Pro Pro Gly Pro Arg Gly Pro Pro Gly Glu Pro Gly
1 5 10 15

Arg Pro Gly Pro Pro Gly Pro Pro Gly Pro Gly
20 25

<210> 385

<211> 22

<212> PRT

<213> Homo sapiens

<400> 385

Asp Tyr Ala Ser Asn Ser Val Ile Leu His Leu Asp Val Gly Asp Glu
1 5 10 15

Val Phe Ile Lys Leu Asp
20

<210> 386

<211> 20

<212> PRT

<213> Homo sapiens

<400> 386

Asp Tyr Ala Ser Asn Ser Val Ile Leu His Leu Asp Val Gly Asp Glu
1 5 10 15

Val Phe Ile Lys
20

<210> 387

<211> 27

<212> PRT

<213> Homo sapiens

<400> 387

Gly Lys Ala Gly Leu Arg Gly Pro Pro Gly Pro Pro Gly Pro Arg Gly
1 5 10 15

Pro Pro Gly Glu Pro Gly Arg Pro Gly Pro Pro
20 25

<210> 388

<211> 27

<212> PRT

<213> Homo sapiens

<400> 388

Gly Pro Pro Gly Glu Pro Gly Arg Pro Gly Pro Pro Gly Pro Pro Gly
1 5 10 15

Pro Gly Pro Gly Gly Val Ala Pro Ala Ala Gly
20 25

<210> 389

<211> 29

<212> PRT

<213> Homo sapiens

<400> 389

Gly Pro Pro Gly Pro Arg Gly Pro Pro Gly Glu Pro Gly Arg Pro Gly
1 5 10 15

Pro Pro Gly Pro Pro Gly Pro Gly Pro Gly Gly Val Ala
20 25

<210> 390

<211> 27

<212> PRT

<213> Homo sapiens

<400> 390

Gly Leu Arg Gly Pro Pro Gly Pro Pro Gly Pro Arg Gly Pro Pro Gly
1 5 10 15

Glu Pro Gly Arg Pro Gly Pro Pro Gly Pro Pro
20 25

<210> 391

<211> 29

<212> PRT

<213> Homo sapiens

<400> 391

Gly Pro Pro Gly Pro Pro Gly Pro Arg Gly Pro Pro Gly Glu Pro Gly
1 5 10 15

Arg Pro Gly Pro Pro Gly Pro Pro Gly Pro Gly Pro Gly
20 25

<210> 392

<211> 29

<212> PRT

<213> Homo sapiens

<400> 392

Gly Ala Lys Gly Glu Val Gly Arg Arg Gly Lys Ala Gly Leu Arg Gly
1 5 10 15

Pro Pro Gly Pro Pro Gly Pro Arg Gly Pro Pro Gly Glu
20 25

<210> 393

<211> 27

<212> PRT

<213> Homo sapiens

<400> 393

Pro His Glu Gly Tyr Glu Val Leu Arg Phe Asp Asp Val Val Thr Asn
1 5 10 15

Val Gly Asn Ala Tyr Glu Ala Ala Ser Gly Lys
20 25

<210> 394

<211> 14

<212> PRT

<213> Homo sapiens

<400> 394

Gly Pro Pro Gly Pro Pro Gly Pro Arg Gly Pro Pro Gly Glu
1 5 10

<210> 395

<211> 27

<212> PRT

<213> Homo sapiens

<400> 395

Gly Glu Pro Gly Arg Pro Gly Pro Pro Gly Pro Pro Gly Pro Gly Pro
1 5 10 15

Gly Gly Val Ala Pro Ala Ala Gly Tyr Val Pro
20 25

<210> 396

<211> 27

<212> PRT

<213> Homo sapiens

<400> 396

Gly Pro Arg Gly Pro Pro Gly Glu Pro Gly Arg Pro Gly Pro Pro Gly
1 5 10 15

Pro Pro Gly Pro Gly Pro Gly Gly Val Ala Pro
20 25

<210> 397

<211> 24

<212> PRT

<213> Homo sapiens

<400> 397

Gly Glu Pro Gly Arg Pro Gly Pro Pro Gly Pro Pro Gly Pro Gly Pro
1 5 10 15

Gly Gly Val Ala Pro Ala Ala Gly
20

<210> 398

<211> 44

<212> PRT

<213> Homo sapiens

<400> 398

Arg Arg Gly Lys Ala Gly Leu Arg Gly Pro Pro Gly Pro Pro Gly Pro

1 5 10 15

Arg Gly Pro Pro Gly Glu Pro Gly Arg Pro Gly Pro Pro Gly Pro Pro
20 25 30

Gly Pro Gly Pro Gly Gly Val Ala Pro Ala Ala Gly
35 40

<210> 399

<211> 27

<212> PRT

<213> Homo sapiens

<400> 399

Gly Arg Arg Gly Lys Ala Gly Leu Arg Gly Pro Pro Gly Pro Pro Gly
1 5 10 15

Pro Arg Gly Pro Pro Gly Glu Pro Gly Arg Pro
20 25

<210> 400

<211> 10

<212> PRT

<213> Homo sapiens

<400> 400

Ser Thr Phe Ser Gly Phe Ile Ile Tyr Pro
1 5 10

<210> 401

<211> 29

<212> PRT

<213> Homo sapiens

<400> 401

Phe Pro Pro Gly Ala Lys Gly Glu Val Gly Arg Arg Gly Lys Ala Gly
1 5 10 15

Leu Arg Gly Pro Pro Gly Pro Pro Gly Pro Arg Gly Pro
20 25

<210> 402

<211> 243

<212> PRT

<213> Macaca mulatta

<400> 402

Met Leu Leu Gly Ala Val Leu Leu Leu Leu Ala Leu Pro Ser His Gly
1 5 10 15

Gln Asp Thr Thr Thr Gln Gly Pro Gly Val Leu Leu Pro Leu Pro Lys
20 25 30

Gly Ala Cys Thr Gly Trp Met Ala Gly Ile Pro Gly His Pro Gly His
35 40 45

Asn Gly Val Pro Gly Arg Asp Gly Arg Asp Gly Thr Pro Gly Glu Lys
50 55 60

Gly Glu Lys Gly Asp Pro Gly Leu Ile Gly Pro Lys Gly Asp Thr Gly
65 70 75 80

Glu Thr Gly Val Thr Gly Ala Glu Gly Pro Arg Gly Phe Pro Gly Ile
85 90 95

Gln Gly Arg Lys Gly Glu Pro Gly Glu Gly Ala Tyr Val Tyr Arg Ser
100 105 110

Ala Phe Ser Val Gly Leu Glu Thr Tyr Val Thr Val Pro Asn Met Pro
115 120 125

Ile Arg Phe Thr Lys Ile Phe Tyr Asn Gln Gln Asn His Tyr Asp Gly
130 135 140

Ser Thr Gly Lys Phe His Cys Asn Ile Pro Gly Leu Tyr Tyr Phe Ala
145 150 155 160

Tyr His Ile Thr Val Tyr Met Lys Asp Val Lys Val Ser Leu Phe Lys
165 170 175

Lys Asp Lys Ala Met Leu Phe Thr Tyr Asp Gln Tyr Gln Glu Asn Asn
180 185 190

Val Asp Gln Ala Ser Gly Ser Val Leu Leu His Leu Glu Val Gly Asp
195 200 205

Gln Val Trp Leu Gln Val Tyr Gly Glu Gly Glu Arg Asn Gly Leu Tyr
210 215 220

Ala Asp Asn Asp Asn Asp Ser Thr Phe Thr Gly Phe Leu Leu Tyr His
225 230 235 240

Asp Thr Asn

<210> 403

<211> 240

<212> PRT

<213> Bos taurus

<400> 403

Met Leu Leu Gln Gly Ala Leu Leu Leu Leu Leu Ala Leu Pro Ser His
1 5 10 15

Gly Glu Asp Asn Met Glu Asp Pro Pro Leu Pro Lys Gly Ala Cys Ala
20 25 30

Gly Trp Met Ala Gly Ile Pro Gly His Pro Gly His Asn Gly Thr Pro
35 40 45

Gly Arg Asp Gly Arg Asp Gly Thr Pro Gly Glu Lys Gly Glu Lys Gly
50 55 60

Asp Ala Gly Leu Leu Gly Pro Lys Gly Glu Thr Gly Asp Val Gly Met
65 70 75 80

Thr Gly Ala Glu Gly Pro Arg Gly Phe Pro Gly Thr Pro Gly Arg Lys
85 90 95

Gly Glu Pro Gly Glu Ala Ala Tyr Val Tyr Arg Ser Ala Phe Ser Val
100 105 110

Gly Leu Glu Thr Arg Val Thr Val Pro Asn Val Pro Ile Arg Phe Thr
115 120 125

Lys Ile Phe Tyr Asn Gln Gln Asn His Tyr Asp Gly Ser Thr Gly Lys
130 135 140

Phe Tyr Cys Asn Ile Pro Gly Leu Tyr Tyr Phe Ser Tyr His Ile Thr
145 150 155 160

Val Tyr Met Lys Asp Val Lys Val Ser Leu Phe Lys Lys Asp Lys Ala
165 170 175

Val Leu Phe Thr Tyr Asp Gln Tyr Gln Glu Lys Asn Val Asp Gln Ala
180 185 190

Ser Gly Ser Val Leu Leu His Leu Glu Val Gly Asp Gln Val Trp Leu
195 200 205

Gln Val Tyr Glu Gly Glu Asn His Asn Gly Val Tyr Ala Asp Asn Val
210 215 220

Asn Asp Ser Thr Phe Thr Gly Phe Leu Leu Tyr His Asn Ile Val Glu
225 230 235 240

<210> 404

<211> 244

<212> PRT

<213> Homo sapiens

<400> 404

Met Leu Leu Leu Gly Ala Val Leu Leu Leu Leu Ala Leu Pro Gly His

1 5 10 15

Asp Gln Glu Thr Thr Ile Gln Gly Pro Gly Val Leu Leu Pro Leu Pro
20 25 30

Lys Gly Ala Cys Thr Gly Trp Met Ala Gly Ile Pro Gly His Pro Gly
35 40 45

His Asn Gly Ala Pro Gly Arg Asp Gly Arg Asp Gly Thr Pro Gly Glu
50 55 60

Lys Gly Glu Lys Gly Asp Pro Gly Leu Ile Gly Pro Lys Gly Asp Ile
65 70 75 80

Gly Glu Thr Gly Val Pro Gly Ala Glu Gly Pro Arg Gly Phe Pro Gly
85 90 95

Ile Gln Gly Arg Lys Gly Glu Pro Gly Glu Gly Ala Tyr Val Tyr Arg
100 105 110

Ser Ala Phe Ser Val Gly Leu Glu Thr Tyr Tyr Thr Ile Pro Asn Met
115 120 125

Pro Glu Arg Phe Thr Lys Ile Phe Tyr Asn Gln Gln Asn His Tyr Asp
130 135 140

Gly Ser Thr Gly Lys Phe His Cys Asn Ile Pro Gly Leu Tyr Tyr Phe
145 150 155 160

Ala Tyr His Ile Thr Val Tyr Met Lys Asp Val Lys Val Ser Leu Phe
165 170 175

Lys Lys Asp Lys Ala Met Leu Phe Thr Tyr Asp Gln Tyr Gln Glu Asn
180 185 190

Asn Tyr Asp Gln Ala Ser Gly Ser Val Leu Leu His Leu Glu Val Gly
195 200 205

Asp Gln Val Trp Leu Gln Val Tyr Gly Glu Gly Glu Arg Asn Gly Leu
210 215 220

Tyr Ala Asp Asn Asp Asn Asp Ser Thr Phe Thr Gly Phe Leu Leu Tyr
225 230 235 240

10005459.120301

His Asp Thr Asn

Replacement Sheet